



**UNITED STATES MARINE CORPS**  
MARINE CORPS INSTALLATIONS NATIONAL CAPITAL REGION  
MARINE CORPS BASE QUANTICO  
3250 CATLIN AVENUE  
QUANTICO VIRGINIA 22134 5001

IN REPLY REFER TO:

6280/5

B 046

**JUL 28 2016**

Ms. Susan Mackert  
Department of Environmental Quality  
13901 Crown Ct.  
Woodbridge, VA 22193

Dear Ms. Mackert:

SUBJECT: VA0002151, VPDES INDUSTRIAL STORMWATER PERMIT RE-  
APPLICATION RESPONSE

Marine Corps Base Quantico received the comments regarding our Industrial Stormwater Permit, VA0002151, dated July 13, 2016. The enclosed response addresses all issues noted in the above mentioned correspondence, to include:

1. Corrected outfall forms for missing intake and effluent data and TOC results (Forms 2C & 2F)
2. Signed Application Form 2F
3. Requests to remove outfalls from the permit

If you have any questions please contact Mr. Jonmark Sullivan at (703) 432-0539.



Sincerely,

KIRK NELSON  
Assistant Chief of Staff,  
Installation & Environment  
Division  
By direction of the Commander

Enclosure: 1. Response to missing information on application  
2. Corrected application forms

VA0002151, VPDES INDUSTRIAL  
STORMWATER PERMIT RE-APPLICATION RESPONSE

**Outfall 003:** Outfall 003 is located at our Water Treatment Plant and is associated with an emergency overflow pond that normally does not contain enough water (normally 2 inches) nor does it discharge on a regular basis. The pond and associated outfall 003 only discharge when an upset or other emergency with pumps and lifts stations may occur. Obtaining the necessary samples from this pond is very difficult or may result in data that is not an accurate representation of the normal discharge that may be seen, if a discharge were to occur.

**Outfall 007:** Form 2F, Section VII. Part A – pH minimum and maximum value - a corrected form is attached

**Outfall 009:**

1. Form 2C, Section V. Part A – pH minimum and maximum – a corrected form is attached
2. Form 2C, Section V. Part B – Total Phosphorus and Total Aluminum were marked as present – Marine Corps Base Quantico (MCBQ) reviewed our original submission and believe that we marked “absent”. However, if the submission was marked “believed present”, it was an error and we have submitted new forms for outfall 009 to reflect Total Phosphorus and Total Aluminum as “absent.”

**Outfall 010:** MCBQ wishes to remove this outfall from our permit. The industrial activity that was associated with this permit is no longer there. The steam lines that were present have been demolished and there is no longer any steam condensate or non-contact cooling water present.

**Outfall 014:** MCBQ wished to remove this outfall from our permit. The industrial activity that was associated with this permit is no longer there. The hangar that was used for maintenance has been demolished. The steam condensate is no longer present both because the steam lines are no longer in use and have been demolished.

**Outfall 016**

1. Form 2C, Section V. Part A – number of analyses – a corrected form is attached
2. Form 2C, Section V. Part A – pH minimum and maximum – a corrected form is attached
3. Form 2C, Section V. Part C – Long term average concentration for dimethyl phthalate has a “q” as a result – This was a typo and the corrected form is attached.
4. Form 2F, Section VII. Part A – pH minimum and maximum – a corrected form is attached.

VA0002151, VPDES INDUSTRIAL  
STORMWATER PERMIT RE-APPLICATION RESPONSE

**Outfall 030:** MCBQ wished to remove this outfall from our permit. The industrial activity that was associated with this permit is no longer there. The dining facility with refrigerator condensate has been demolished.

**Outfall 035:** 1. Form 2C, Section V. Part A – number of analyses – a corrected form is attached  
2. Form 2C, Section V. Part A – pH minimum and maximum – a corrected form is attached.

**Outfall 072:** Form 2F, Section VII. Part A – pH minimum and maximum – a corrected form is attached.

**Outfall 073:** Form 2F, Section VII. Part A – pH minimum and maximum – a corrected form is attached.

**Outfall 074:** Form 2F, Section VII. Part A – pH minimum and maximum – a corrected form is attached.

**Outfall 086:** Form 2F, Section VII. Part A – pH minimum and maximum – a corrected form is attached.

**Outfall 090:** Form 2F, Section VII. Part A – pH minimum and maximum – a corrected form is attached.

**Permit Application:** Form 2F, Section V. Part A – Signature not provided on non-stormwater discharges – a corrected form is attached.



**UNITED STATES MARINE CORPS**  
MARINE CORPS INSTALLATIONS NATIONAL CAPITAL REGION  
MARINE CORPS BASE QUANTICO  
3250 CATLIN AVENUE  
QUANTICO VIRGINIA 22134-5001



IN REPLY REFER TO:

5090

B046

**JUN 23 2016**

Ms. Susan Mackert  
Department of Environmental Quality  
13901 Crown Ct.  
Woodbridge, VA 22193

Dear Ms. Mackert:

SUBJECT: INDUSTRIAL STORM WATER PERMIT REAPPLICATION VA0002151

The Quantico Industrial Storm Water Discharge Reapplication Permit package for VPDES permit VA0002151 is enclosed for your review and approval.

Please contact Mr. Jonmark Sullivan at (703) 432-0539 if you have any questions.

Sincerely,

J. D. PROVENZANO III

Deputy AC/S

Installation & Environment Division

By direction of the Commander

Enclosures: 1. VA0002151 reapplication package



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**VPDES DISCHARGE PERMIT APPLICATION  
FOR PROCESS WASTEWATER AND  
STORMWATER ASSOCIATED WITH  
INDUSTRIAL ACTIVITY**

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**Marine Corps Base Quantico  
Quantico, Virginia**

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MCB QUANTICO VPDES PERMIT APPLICATION  
VPDES PERMIT NO. VA0002151

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Attachment Section XI Outfall Location Maps

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Attachment Table 2C.II-B

Attachment Table 2C.II-C

Attachment Form 2C.VII Biological Toxicity Testing Data

**Form 2F, Application for Discharge of Stormwater Associated with Industrial Activity**

Attachment Table 2F.I

Attachment Form 2F.III Drainage Maps

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Attachment Form 2F.IV.B Pollutant Sources

Attachment Form 2F.IV-C Narrative of Pollutant Sources

Attachment Form 2F.V-B Testing for Non-Stormwater Discharges

Attachment Form 2F.VIII Biological Toxicity Testing Data

FORM <b>1</b> GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY <b>GENERAL INFORMATION</b> Consolidated Permits Program (Read the "General Instructions" before starting.)		I. EPA I.D. NUMBER	
LABEL ITEMS		PLEASE PLACE LABEL IN THIS SPACE		GENERAL INSTRUCTIONS	
I. EPA I.D. NUMBER				If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.	
III. FACILITY NAME					
V. FACILITY MAILING ADDRESS					
VI. FACILITY LOCATION					
II. POLLUTANT CHARACTERISTICS					
INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of <b>bold-faced terms</b> .					
SPECIFIC QUESTIONS			SPECIFIC QUESTIONS		
A. Is this facility a <b>publicly owned treatment works</b> which results in a <b>discharge to waters of the U.S.</b> ? (FORM 2A)			B. Does or will this facility (either existing or proposed) include a <b>concentrated animal feeding operation</b> or <b>aquatic animal production facility</b> which results in a <b>discharge to waters of the U.S.</b> ? (FORM 2B)		
C. Is this a facility which currently results in <b>discharges to waters of the U.S.</b> other than those described in A or B above? (FORM 2C)			D. Is this a proposed facility (other than those described in A or B above) which will result in a <b>discharge to waters of the U.S.</b> ? (FORM 2D)		
E. Does or will this facility treat, store, or dispose of <b>hazardous wastes</b> ? (FORM 3)			F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)			H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		
I. Is this facility a proposed <b>stationary source</b> which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)			J. Is this facility a proposed <b>stationary source</b> which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		
III. NAME OF FACILITY					
1 SKIP Marine Corps Base					
15 16 - 29 30 69					
IV. FACILITY CONTACT					
A. NAME & TITLE (last, first, & title)					
2 Jonmark Sullivan Water Program Manager					
15 16 45 46 48 49 51 52- 55					
B. PHONE (area code & no.)					
703 432-0539					
V. FACILITY MAILING ADDRESS					
A. STREET OR P.O. BOX					
3 3049 Bordelon Street					
15 16 45					
B. CITY OR TOWN					
4 Quantico					
15 16 40 41 42 47 51					
C. STATE					
VA					
D. ZIP CODE					
22134					
VI. FACILITY LOCATION					
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER					
5 3049 Bordelon Street					
15 16 45					
B. COUNTY NAME					
Prince William-Stafford					
46 70					
C. CITY OR TOWN					
6 Quantico					
15 16 40 41 42 47 51 52 -54					
D. STATE					
VA					
E. ZIP CODE					
22134					
F. COUNTY CODE (if known)					

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)									
A. FIRST					B. SECOND				
C	7	9	7	1	1	C	7		
(specify) NATIONAL SECURITY MARINE CORPS					(specify)				
15	16	17	18	19	15	16	17	18	
C. THIRD					D. FOURTH				
C	7				C	7			
(specify)					(specify)				
15	16	17	18	19	15	16	17	18	
VIII. OPERATOR INFORMATION									
A. NAME									
C	8	UNITED STATES MARINE CORPS							
15	16	55 66							
B. Is the name listed in Item VIII-A also the owner? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO									
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other," specify.)									
F = FEDERAL S = STATE P = PRIVATE					M = PUBLIC (other than federal or state) O = OTHER (specify)				
F					(specify)				
56					D. PHONE (area code & no.)				
					A 703 432-0539				
					15 16 17 18 19 20 21 22 23 24 25 26				
E. STREET OR P.O. BOX									
3049 Bordelon Street									
26 55									
F. CITY OR TOWN									
C	B	QUANTICO							
15	16	40 41 42 43 44 45 46 47 48 49 50 51 52							
G. STATE					H. ZIP CODE				
VA					22134				
					IX. INDIAN LAND				
					Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				
X. EXISTING ENVIRONMENTAL PERMITS									
A. NPDES (Discharges to Surface Water)					D. PSD (Air Emissions from Proposed Sources)				
C	9	N			C	9	P		
See attached									
15	16	17	18	19	15	16	17	18	
B. UIC (Underground Injection of Fluids)					E. OTHER (specify)				
C	9	U			C	9			
					(specify)				
15	16	17	18	19	15	16	17	18	
C. RCRA (Hazardous Wastes)					E. OTHER (specify)				
C	9	R			C	9			
					(specify)				
15	16	17	18	19	15	16	17	18	
XI. MAP									
<p>Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.</p>									
XII. NATURE OF BUSINESS (provide a brief description)									
<p>To develop and provide training to major elements of the U.S. Marine Corps officers and senior enlisted personnel. To provide helicopter support for the U.S. Government Executive Branch. To develop equipment doctrine, tactics and techniques for weapons and weapons systems to be used by landing forces in amphibious operations. To maintain and operate facilities and provide administrative/logistical support for the installation.</p>									
XIII. CERTIFICATION (see instructions)									
<p>I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.</p>									
A. NAME & OFFICIAL TITLE (type or print)					B. SIGNATURE			C. DATE SIGNED	
J. D. Provenzano III								23 Jun 2016	
Deputy, AC/S Installation & Env Div									
COMMENTS FOR OFFICIAL USE ONLY									
C					C				
15	16	17	18	19	15	16	17	18	



MCB Quantico VPDES Permit Renewal  
Form 1, Section X – Existing Environmental Permits

A. NPDES (Discharges to Surface Water)

VA 0028371	Camp Upshur Sewage Treatment Plant
VA 0028363	Mainside Sewage Treatment Plant
VAR 10	General Construction Permits for Stormwater
VAR 040069	Municipal Separate Storm Sewer System

B. UIC (Underground Injection of Fluids)

None

C. RCRA (Hazardous Wastes)

VA1170024722 Hazardous Waste Landfill Post Closure Permit

D. Air (Air Emissions from Proposed Sources)

70267 CHP  
70267 CDC

E. Other (Specify)

6153675	Waterworks Operation Permit – Mainside
VA 411	Solid Waste Management Permit
STFRD-002	Stafford County, Virginia, Significant Industrial User Permit (Categorical)
VA6153063	Camp Upshur Water System
VA6153060	Camp Barrett Water System

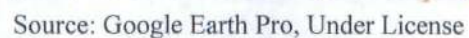
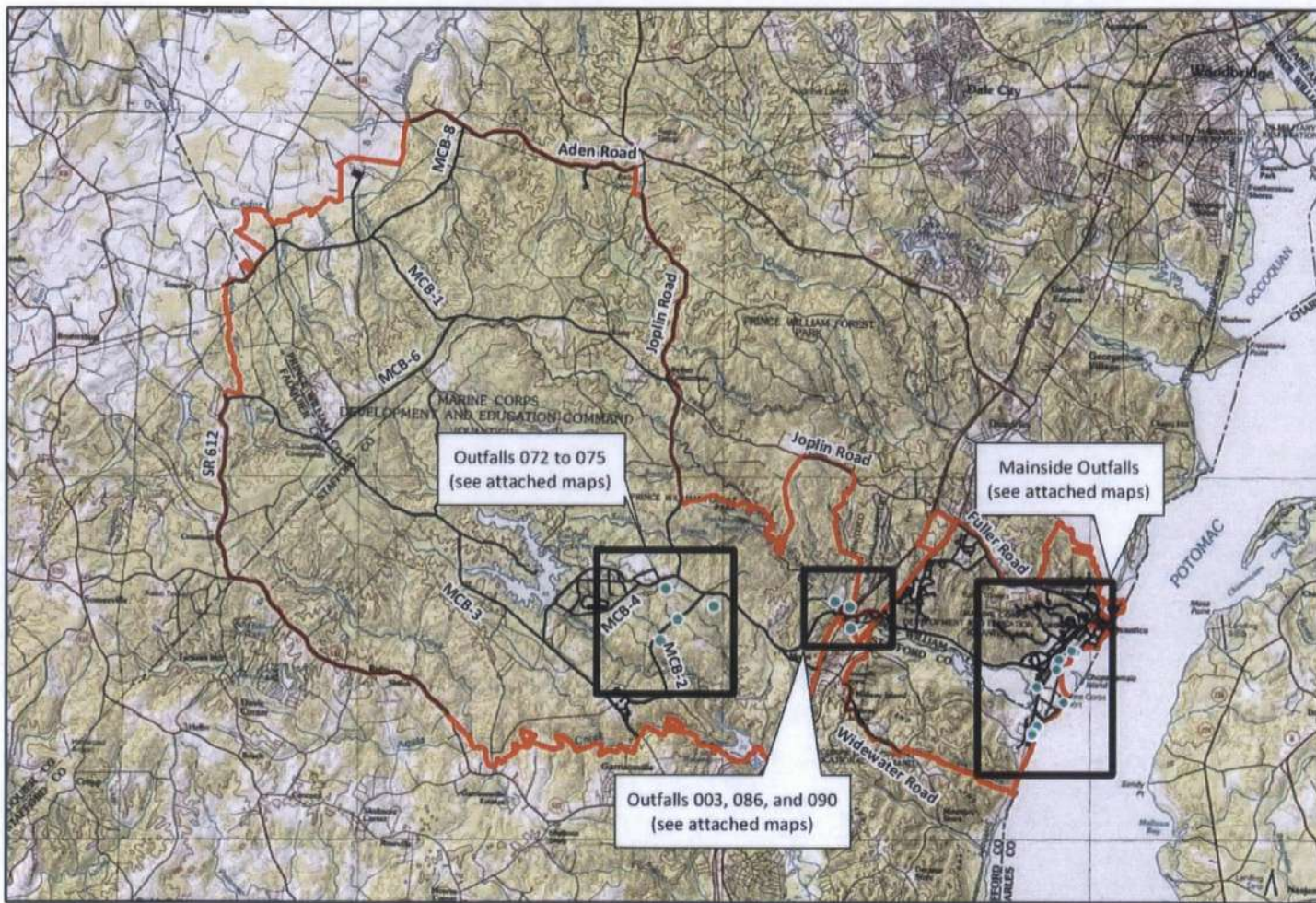


Figure 1-XI-1





Source: USGS Topographic Maps.  
 USGS Quads: 7.5 minute series  
 Independent Hill  
 Joplin  
 Stafford  
 Quantico  
 Somerville  
 Nokesville  
 Widewater

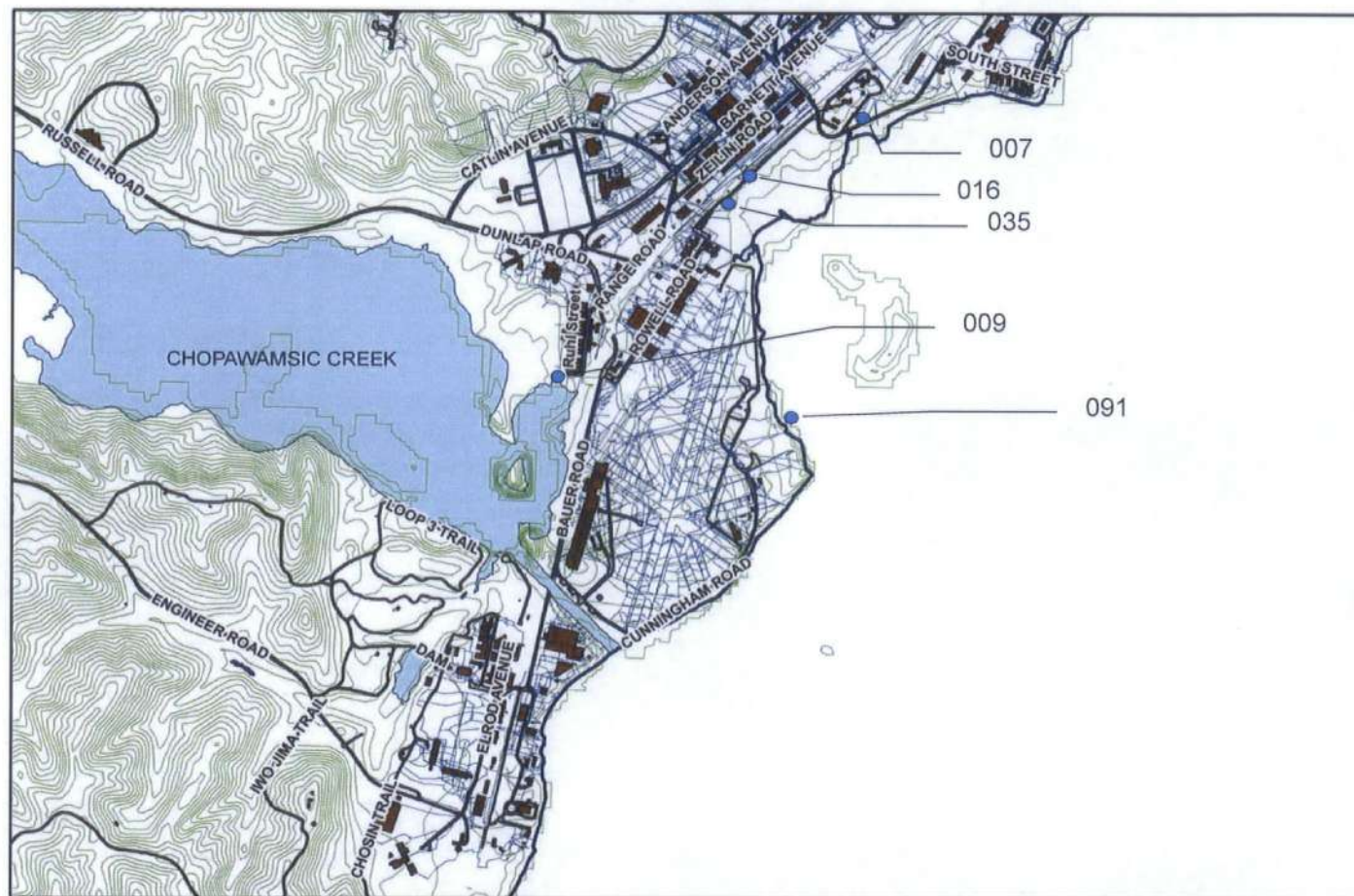


## OUTFALL LOCATION MAP

VPDES Permit Renewal 2016  
 Marine Corp Base Quantico, Virginia

Figure 1-XI-2





Outfall 007:	Lat-38.30.54 Long-77.17.55
Outfall 016:	Lat-38.30.47 Long-77.18.11
Outfall 035:	Lat-38.30.31 Long-77.18.00
Outfall 009:	Lat-38.30.21 Long-77.18.30
Outfall 091:	Lat-38.30.13 Long-77.18.03

#### Legend

- Potomac River Bank
- Storm Sewer Line
- 10ft Contours USGS
- Structure Area
- VPDES Outfalls

Source: Quantico GIS, 2004.

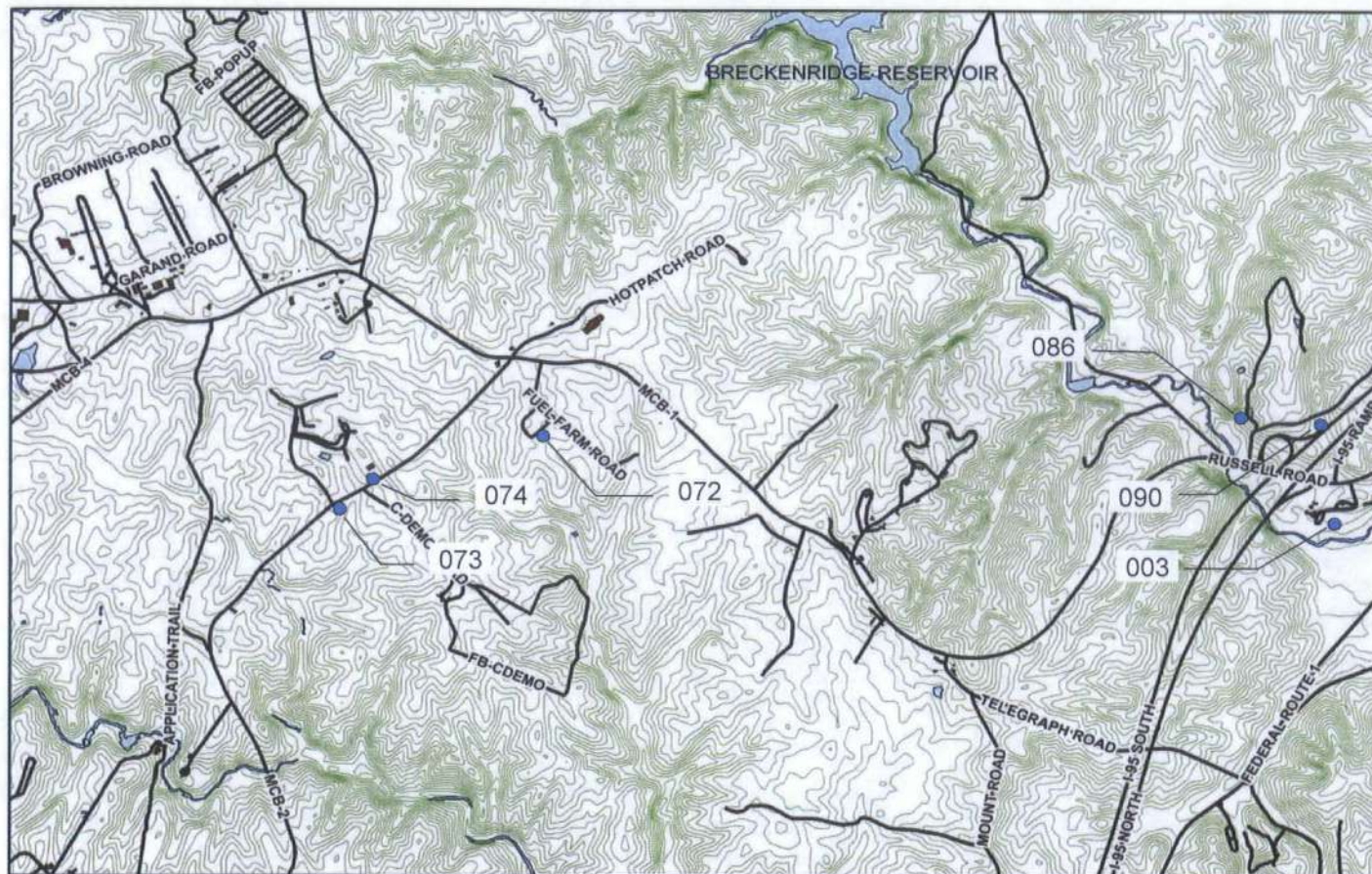


## MAINSIDE VPDES OUTFALLS

VPDES Permit Renewal 2016  
Marine Corp Base Quantico, Virginia

Figure 1-XI-3





Outfall 074: Lat-38.31.23 Long-77.25.19  
 Outfall 073: Lat-38.31.16 Long-77.24.26  
 Outfall 072: Lat-38.31.26 Long-77.24.40  
 Outfall 086: Lat-38.31.31 Long-77.22.23  
 Outfall 090: Lat-38.31.30 Long-77.22.06  
 Outfall 003: Lat-38.31.09 Long-77.22.08

#### Legend

- 10ft Contours USGS
- Road Areas
- Storm Sewer Line
- Stucture Area
- VPDES Outfalls

Source: Quantico GIS, 2004.

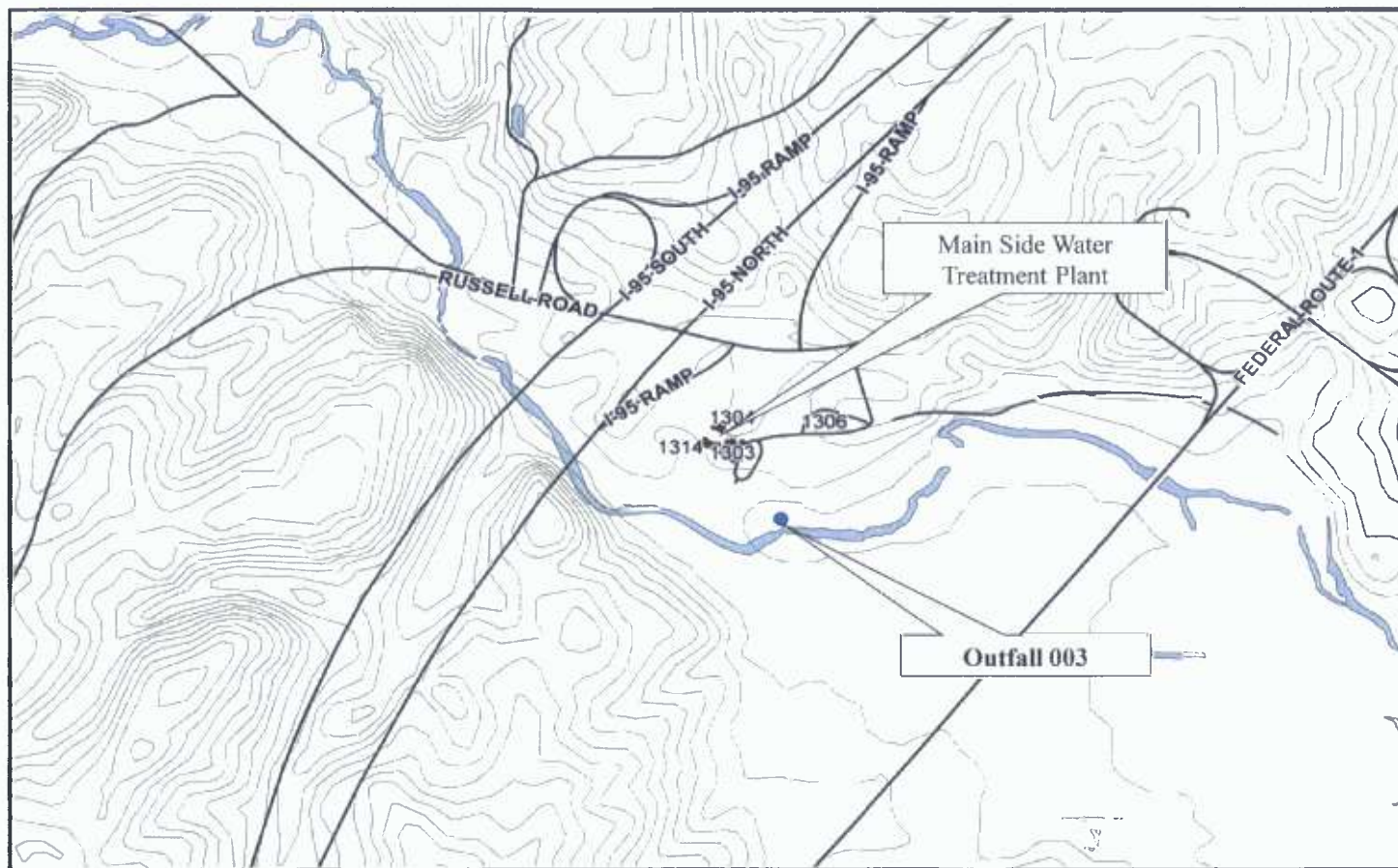


## WESTERN QUANTICO VPDES OUTFALLS

VPDES Permit Renewal 2016  
 Marine Corp Base Quantico, Virginia

Figure 1-XI-4





Outfall 003: Lat-38.31.09 Long-77.22.08

**Legend**

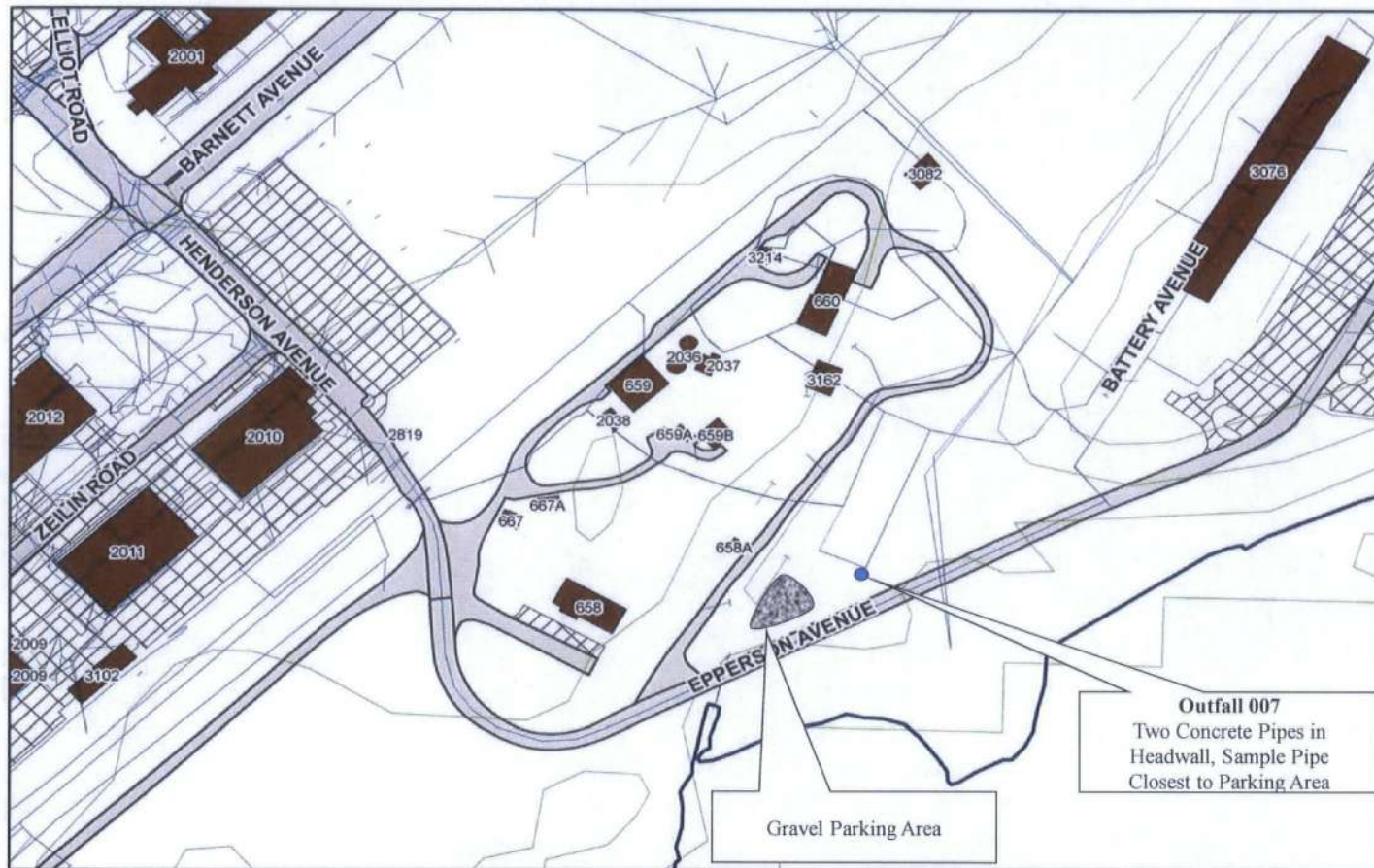
- 10ft Contours USGS
- Road Areas
- Storm Sewer Line
- Structure Area
- VPDES Outfalls

Source: Quantico GIS, 2004.



**VPDES OUTFALL 003**  
**VPDES Permit Renewal 2016**  
 Marine Corp Base Quantico, Virginia

Figure 1-XI-6



Outfall 007: Lat-38.30.54 Long-77.17.55

### Legend

- Potomac River Bank
- 10ft Contours USGS
- Storm Sewer Line
- Road Areas
- ▨ Parking Areas
- Structure Area
- VPDES Outfalls

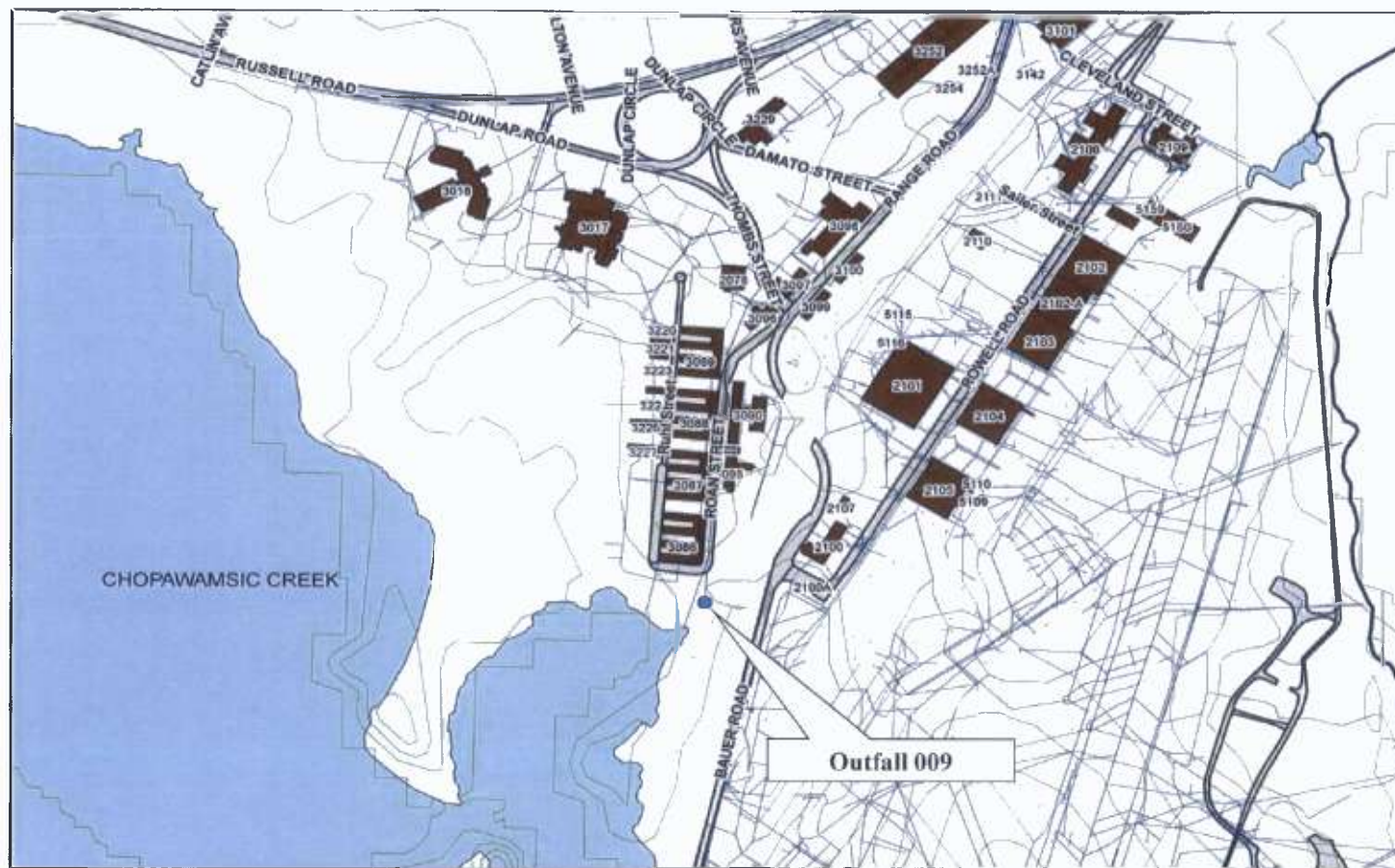
Source: Quantico GIS, 2004.



**VPDES OUTFALL 007**  
**VPDES Permit Renewal 2016**  
 Marine Corp Base Quantico, Virginia

Figure 1-XI-5





Outfall 009: Lat-38.30.21 Long-77.18.30

### Legend

- Potomac River Bank
- 10ft Contours USGS
- - - Storm Sewer Line
- Road Areas
- Structure Area
- VPDES Outfalls

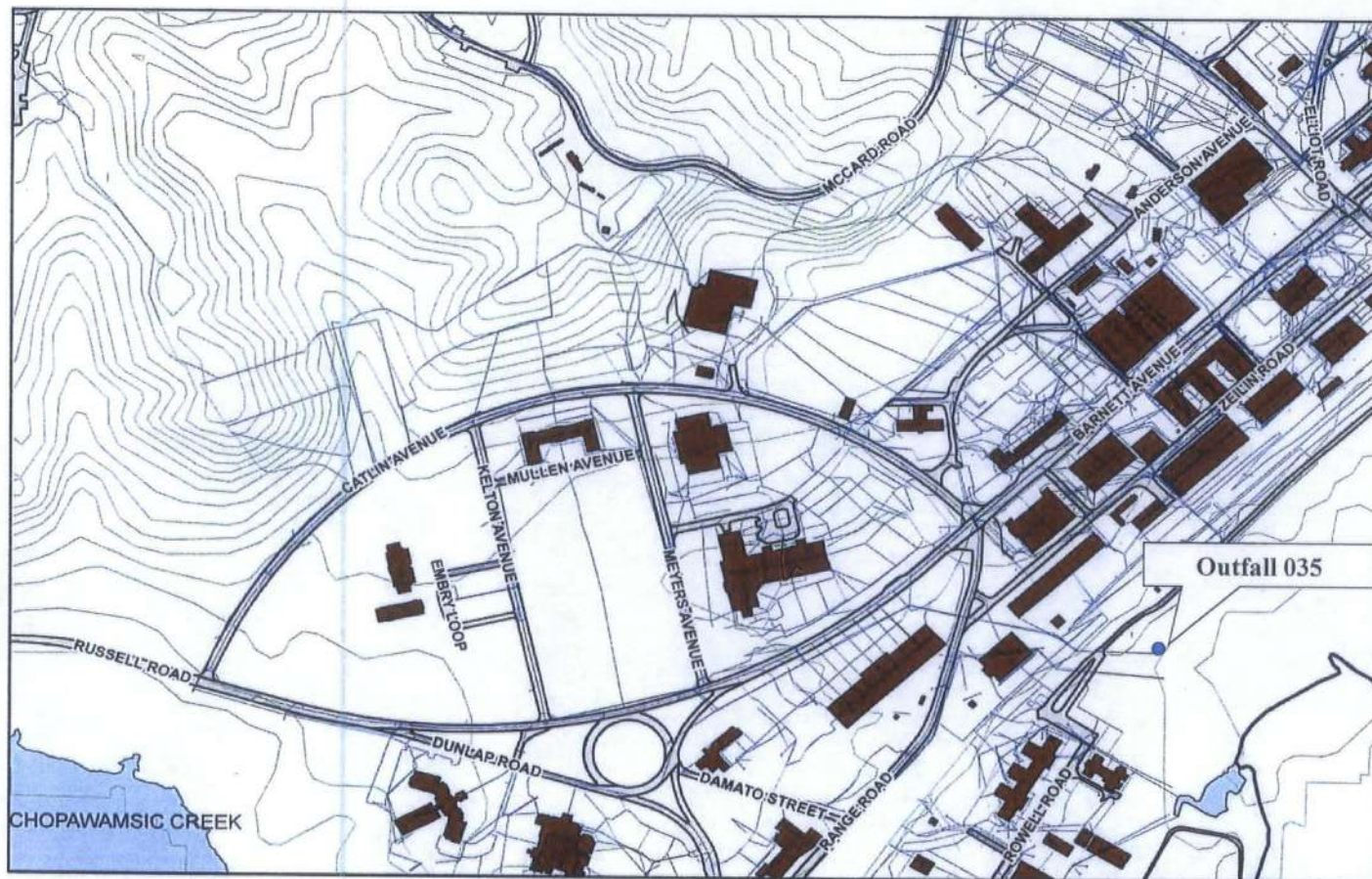
Source: Quantico GIS, 2004.



**VPDES OUTFALL 009**  
 VPDES Permit Renewal 2016  
 Marine Corp Base Quantico, Virginia

Figure 1-XI-7





Outfall 035: Lat-38.30.31 Long-77.18.00

Outfall 035

#### Legend

- Potomac River Bank
- 10ft Contours USGS
- Storm Sewer Line
- Road Areas
- Structure Area
- VPDES Outfalls
- Drainage Area

0 62.5 125 250 375 500 Meters

Source: Quantico GIS, 2004.



**VPDES OUTFALL 035**  
 VPDES Permit Renewal 2016  
 Marine Corp Base Quantico, Virginia

Figure 1-XI-8

VA0002151

OMB No. 2040-0086

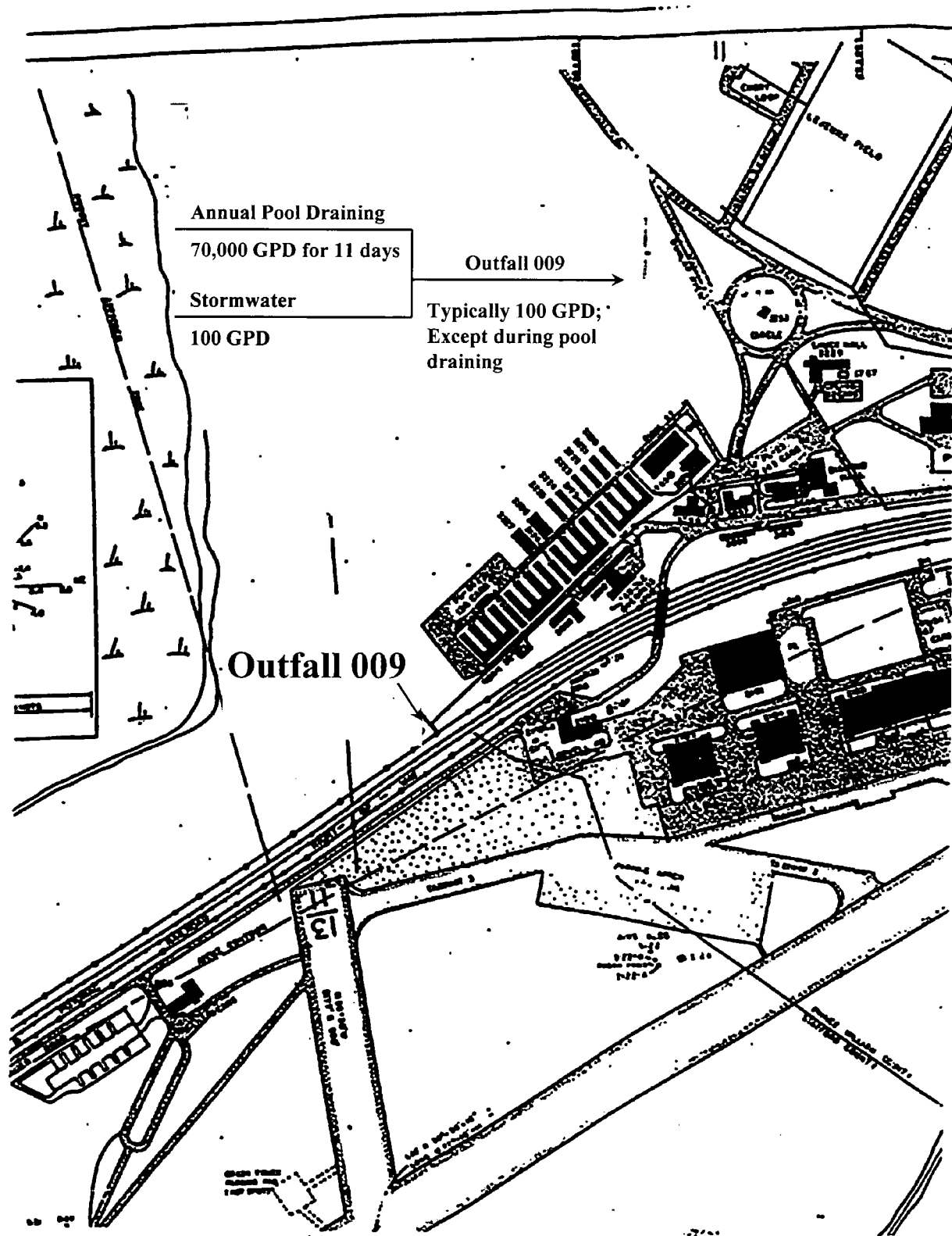
Approval expires 3-31-98.

Please print or type in the unshaded areas only.

EPA Form 3510-2C (8-90)

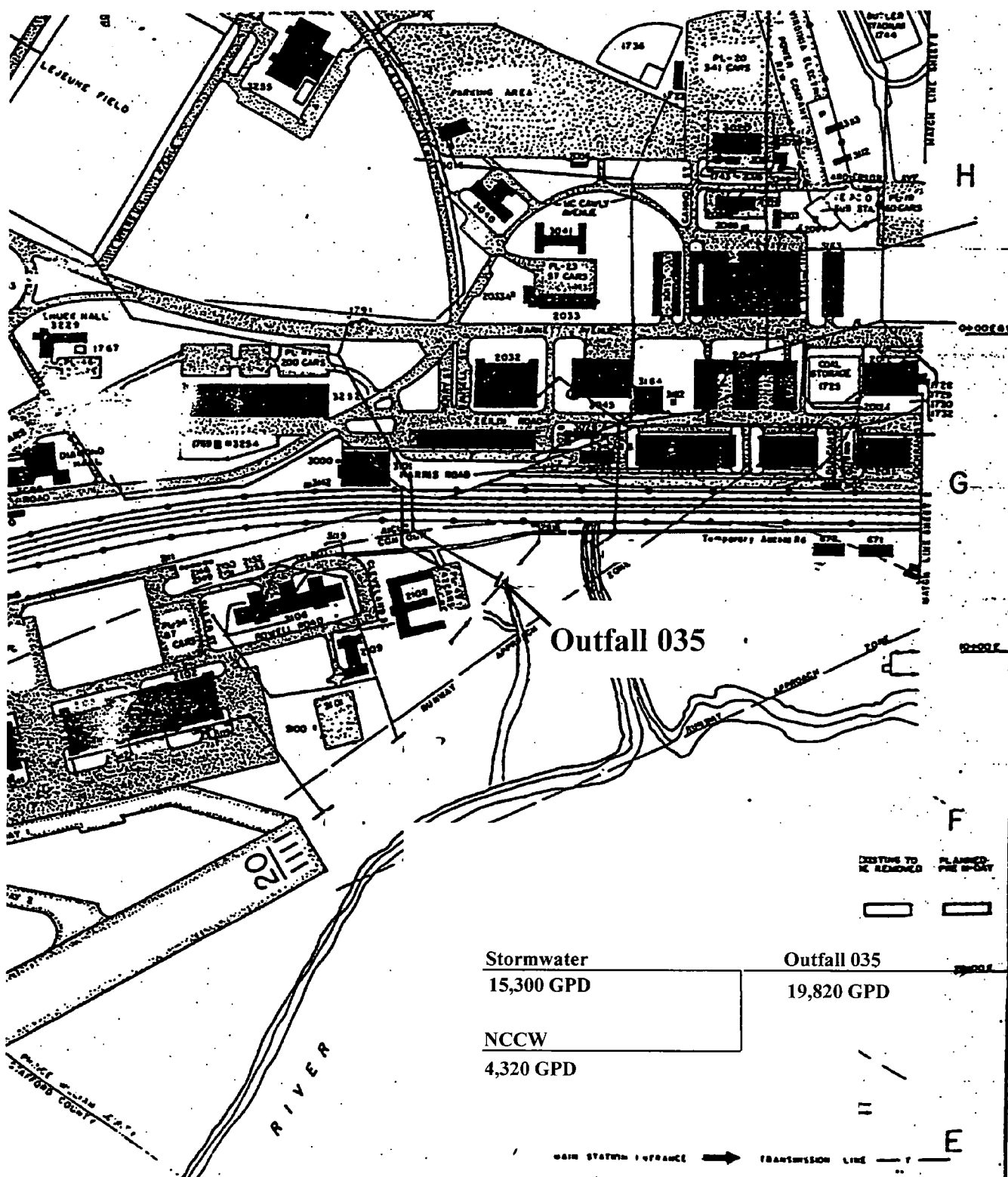


Stormwater runoff estimate based on a total rainfall of 0.1 inches



MCB, Quantico VPDES Permit Application  
Water Balance for Outfall 009

Figure  
2C.2-2



Stormwater runoff estimate based on a total rainfall of 0.1 inches



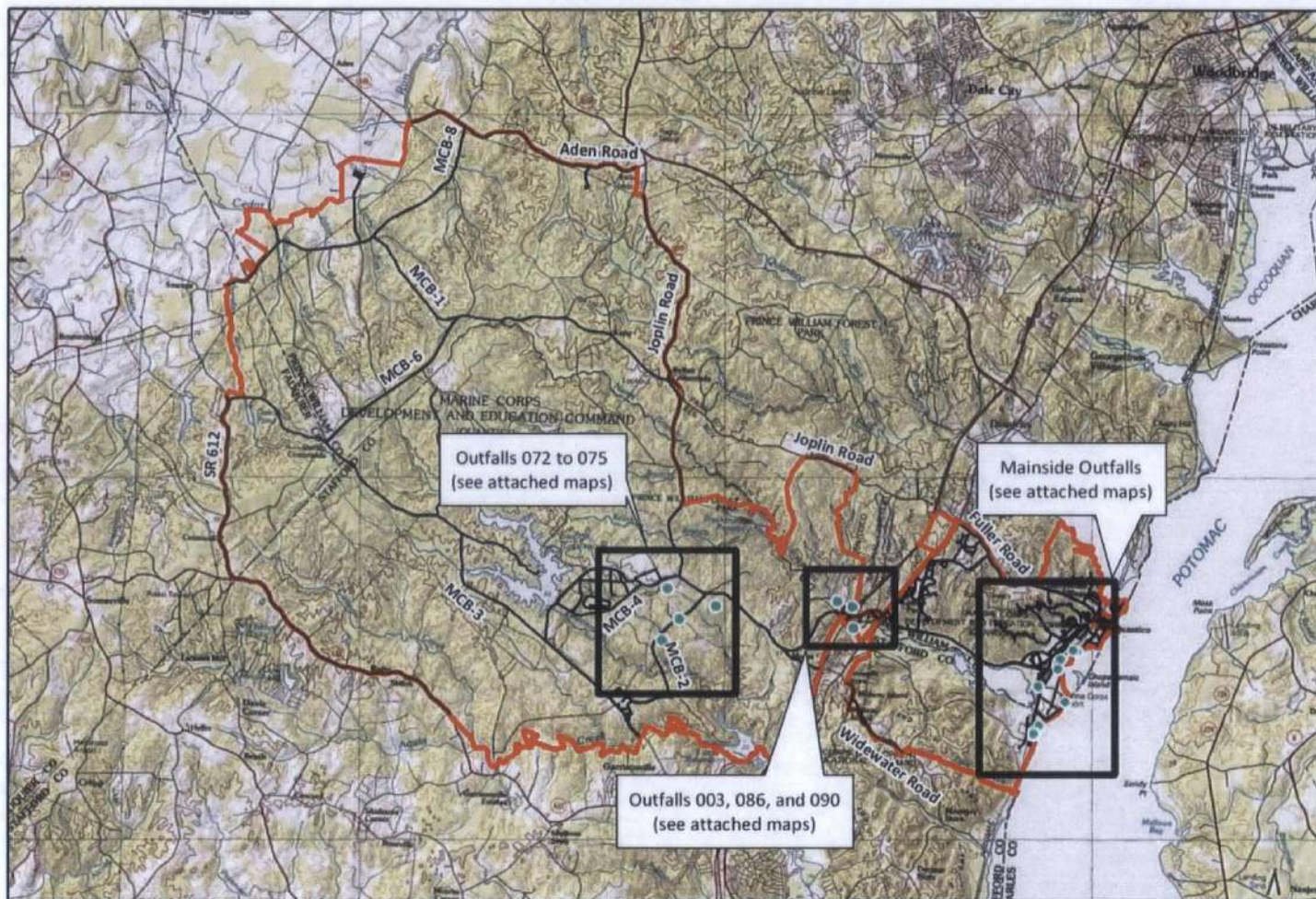
MCB, Quantico VPDES Permit Application  
Water Balance for Outfall 035

Figure  
2C.2-8

**Table 2C.I-A**  
**MCB Quantico VPDES Permit Renewal**  
**VPDES Permit No. VA0002151**

A. Outfall Number (List)	B. Latitude			C. Longitude			D. Receiving Water (Name)
	1. Deg.	2. Min	3. Sec.	1. Deg.	2. Min.	3. Sec.	
003	38	31	09	77	22	08	Chopawamsic Creek
009	38	30	21	77	18	30	Unnamed tributary to Chopawamsic Creek
010	38	30	54	77	17	46	Unnamed tributary to Potomac River
014	38	30	36	77	18	11	Unnamed tributary to Potomac River
016	38	30	47	77	18	11	Unnamed tributary to Potomac River
035	38	30	31	77	18	00	Unnamed tributary to Potomac River





Source: USGS Topographic Maps.  
 USGS Quads: 7.5 minute series  
 Independent Hill  
 Joplin  
 Stafford  
 Quantico  
 Somerville  
 Nokesville  
 Widewater

#### Legend

- Permitted Outfalls
- Road Centerlines
- ▭ Installation Area

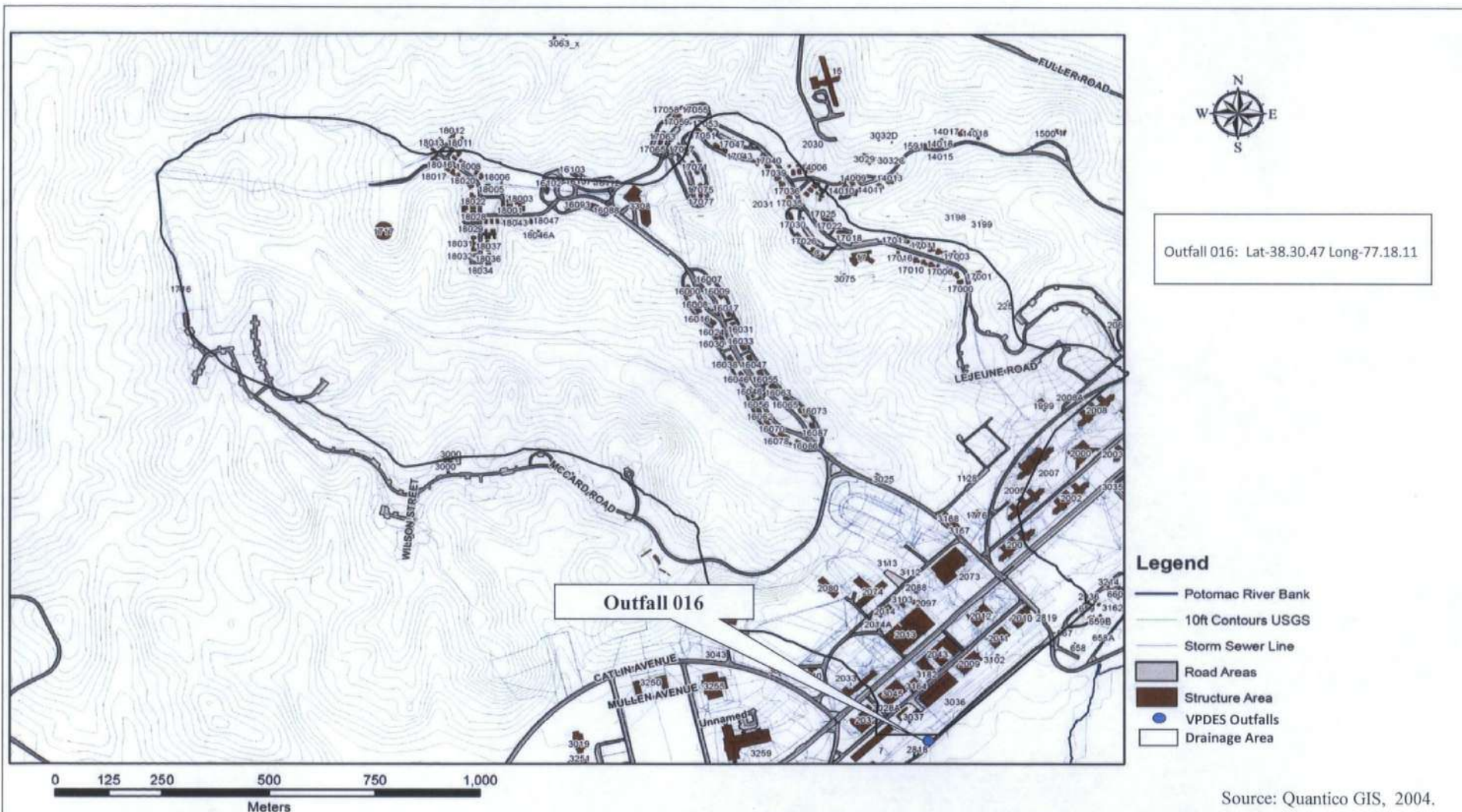


## OUTFALL LOCATION MAP

VPDES Permit Renewal 2016  
 Marine Corp Base Quantico, Virginia

Figure 2F.III-1

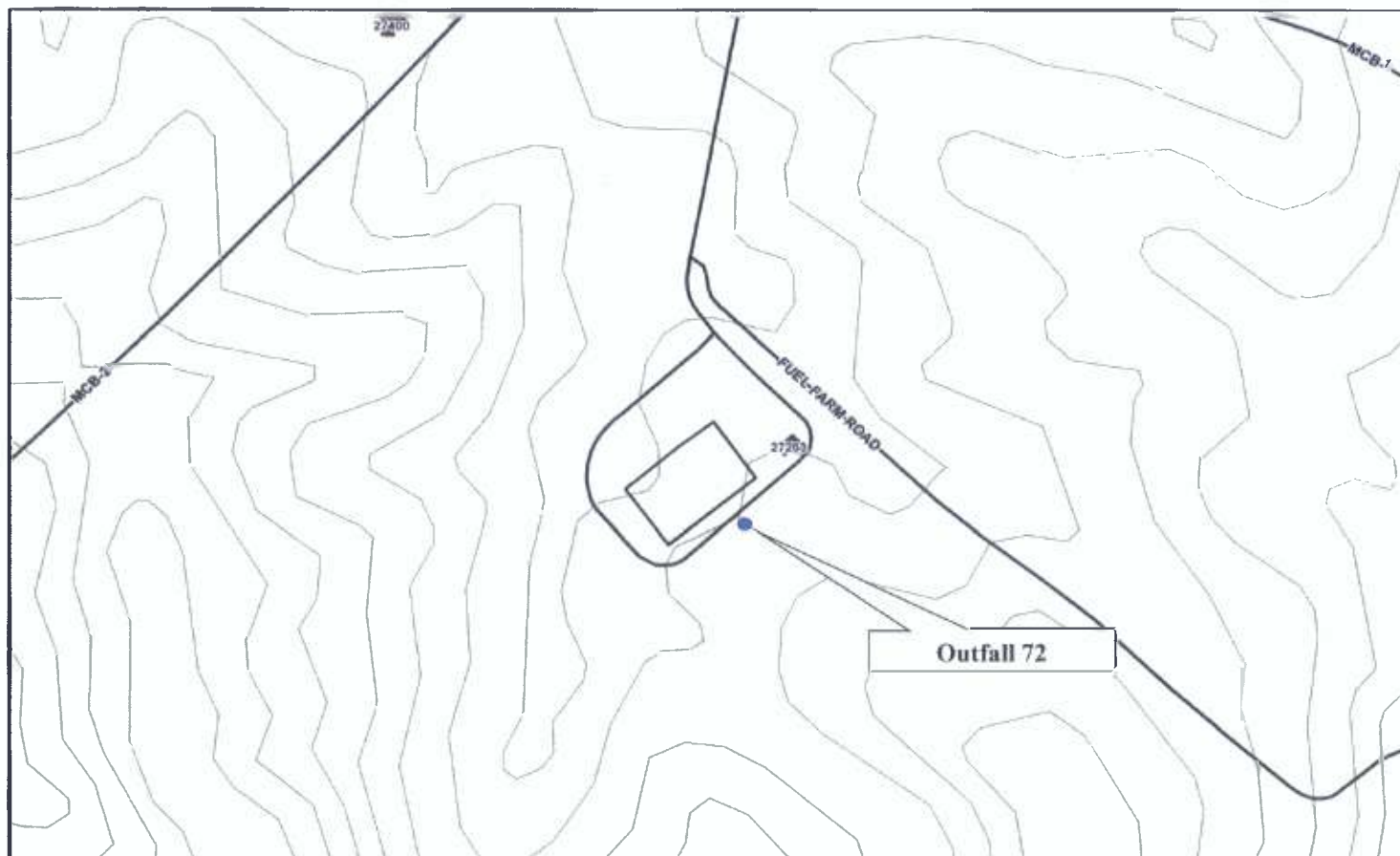




**VPDES OUTFALL 016 AND DRAINAGE BASIN**  
**VPDES Permit Renewal 2016**  
 Marine Corp Base Quantico, Virginia

Figure 2F.III-2





Outfall 072: Lat-38.31.26 Long-77.24.40

#### Legend

- 10ft Contours USGS
- Storm Sewer Line
- Road Areas
- Structure Area
- VPDES Outfalls
- Drainage Area

Source: Quantico GIS, 2004.



### VPDES OUTFALL 072 AND DRAINAGE BASIN

VPDES Permit Renewal 2016  
Marine Corp Base Quantico, Virginia

Figure 2F.III-3



Outfall 073: Lat-38.31.16 Long-77.25.26

#### Legend

- 10ft Contours USGS
- Storm Sewer Line
- Road Areas
- Structure Area
- VPDES Outfalls
- Drainage Area

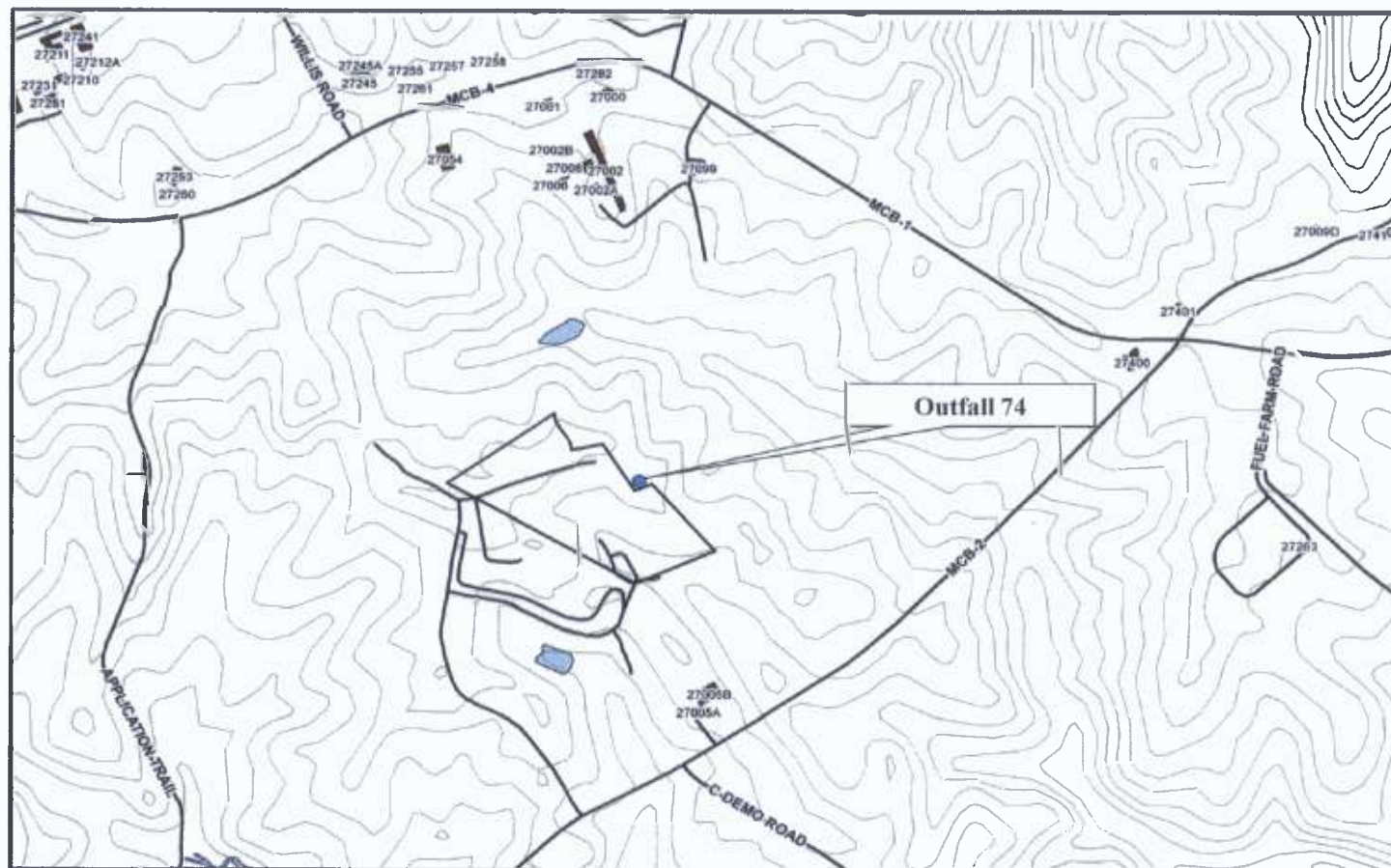
Source: Quantico GIS, 2004.



### VPDES OUTFALL 073 AND DRAINAGE BASIN

VPDES Permit Renewal 2016  
Marine Corp Base Quantico, Virginia

Figure 2F.III-4



Outfall 074: Lat-38.31.23 Long-77.25.19

**Legend**

- 10ft Contours USGS
- Storm Sewer Line
- Road Areas
- Structure Area
- VPDES Outfalls
- Drainage Area

0 125 250 500 750 1,000 Meters

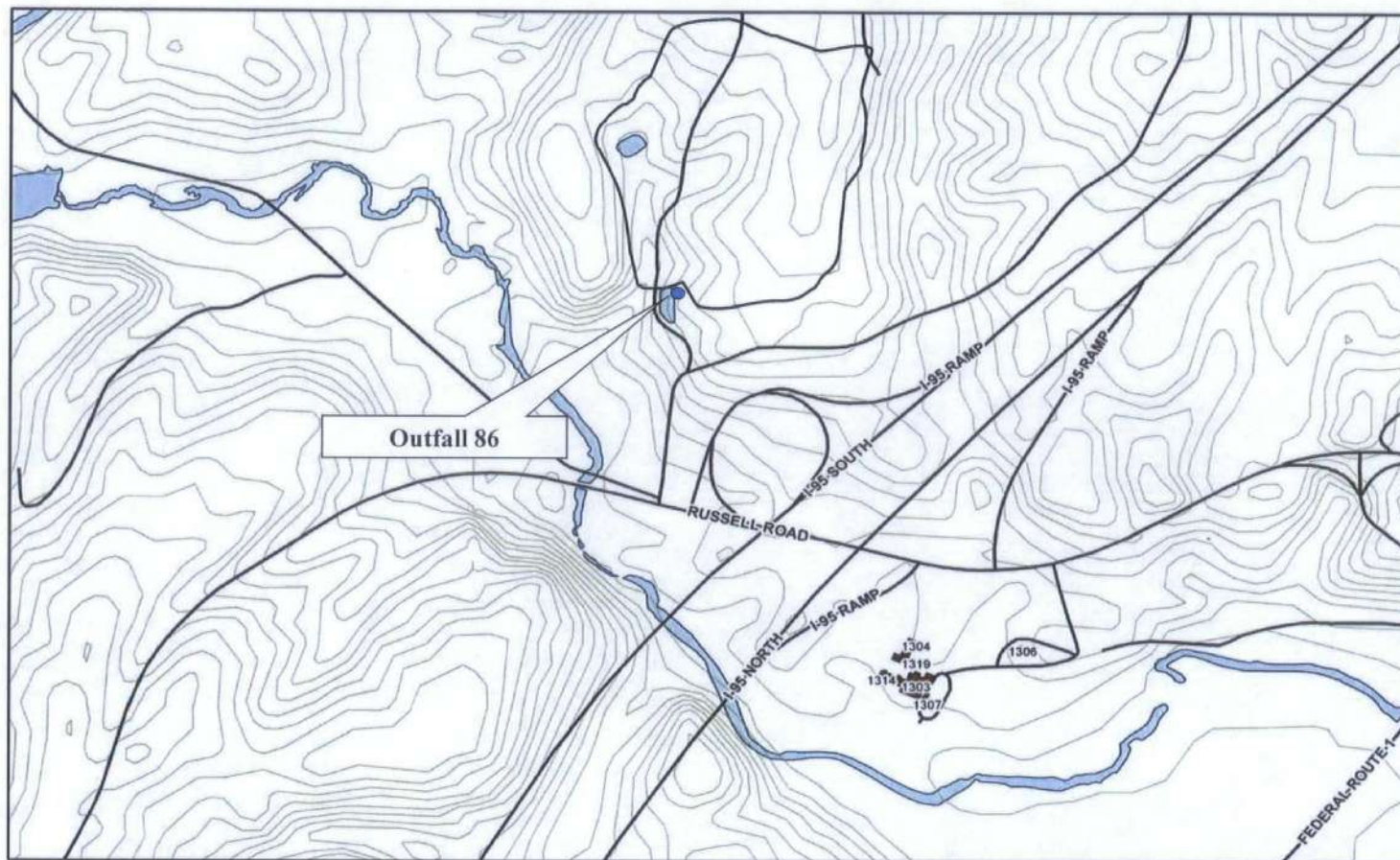
Source: Quantico GIS, 2004.



**VPDES OUTFALL 074 AND DRAINAGE BASIN**  
 VPDES Permit Renewal 2016  
 Marine Corp Base Quantico, Virginia

Figure 2F.III-5





Outfall 086: Lat-38.31.31 Long-77.22.23

#### Legend

- 10ft Contours USGS
- Road Areas
- Storm Sewer Line
- Structure Area
- VPDES Outfalls
- Drainage Area

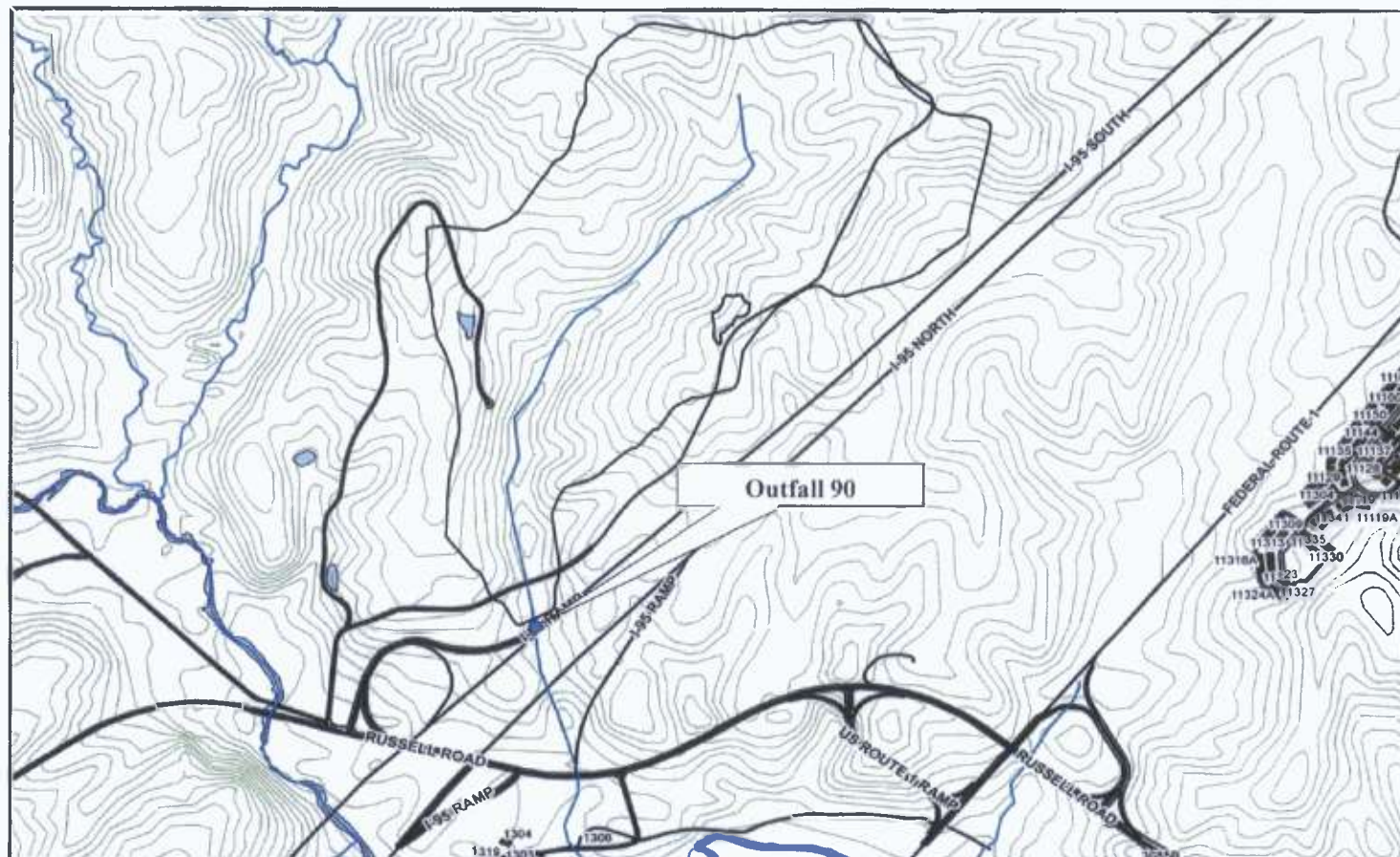
Source: Quantico GIS, 2004.



### VPDES OUTFALL 086 AND DRAINAGE BASIN

VPDES Permit Renewal 2016  
Marine Corp Base Quantico, Virginia

Figure 2F.III-6



Outfall 090: Lat-38.31.30 Long-77.22.06

#### Legend

- 10ft Contours USGS
- Road Areas
- Storm Sewer Line
- Structure Area
- VPDES Outfalls
- Drainage Area

Source: Quantico GIS, 2004.

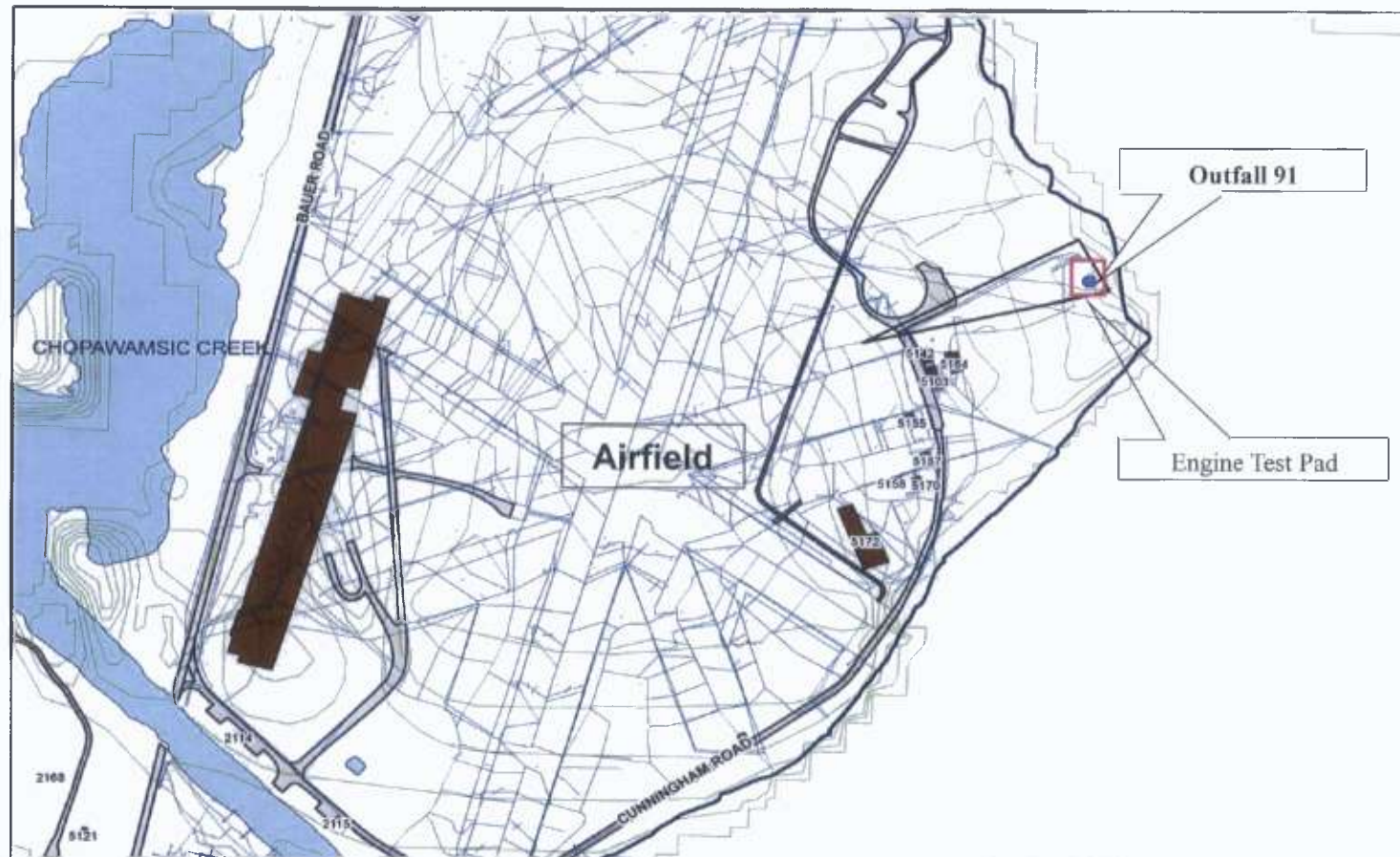


### VPDES OUTFALL 090 AND DRAINAGE BASIN

VPDES Permit Renewal 2016  
Marine Corp Base Quantico, Virginia

Figure 2F.III-7





Outfall 091: Lat-38.30.13 Long-77.18.03

#### Legend

- Potomac River Bank
- 10ft Contours USGS
- Storm Sewer Line
- Road Areas
- Structure Area
- VPDES Outfalls
- Drainage Area

Source: Quantico GIS, 2004.



### VPDES OUTFALL 091 AND DRAINAGE BASIN

VPDES Permit Renewal 2016  
Marine Corp Base Quantico, Virginia

Figure 2F.III-8

**IV. Narrative Description of Pollutant Sources**

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
			PLEASE SEE TABLE 2C.II-C ON THE POT FLOW		

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1

**V. Nonstormwater Discharges**

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name and Official Title (type or print)	Signature	Date Signed
KIRK NELSON AC/S INSTALLATION & ENVIRONMENT		7/28/2010

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

See attached

**VI. Significant Leaks or Spills**

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

Table 2F-IV.A  
MCB Quantico VPDES Permit Renewal  
VPDES Permit No. VA0002151

Outfall No.	Area of Impervious Surface (Acres)	Total Area Drained (Acres)
007	0.2	0.24
010	70.5	220
014	24.5	27.5
016	132	440
072	0.5	2.5
073	0	16.5
074	0	16.5
086	0	40
090	0	80
091	0.27	0.27

Note: Outfalls No. 010, 014 and 030 have been deleted from the permit due to removal of industrial activities.



## Attachment 2F.IV.B – Pollutant Sources

### Form 2F, Item IV Narrative Description of Pollutant Sources

*B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored, or disposed...*

#### **Outfall 007 – Mainside Sewage Treatment Plant (STP)**

Industrial storm water pollutant source activities performed in this area include indoor storage as well as loading and unloading of Hazardous Materials. Storages of water treatment chemicals (Sodium Hydroxide, Alum, Polymer, Soda Ash), greases, fuels (including diesel fuels), and oils are contained within buildings. Most of the storages are above ground storage tanks that are confined in concrete berms and/or dikes. Diesel fuels storage tanks have double walls construction and are self-confined. Drainage from the south end of the facility in the vicinity of the STP Admin Building is conveyed directly to this outfall.

#### **Outfall 010 – Mainside Drainage – North**

Possible spot application of pesticides and herbicides in this area. No treatment, storage or disposal of significant materials.

#### **Outfall 014 – HMX-1 Hangar and Maintenance**

Residual POL from the aircraft wash rack (Discharges during washing operations are routed to the sanitary sewer).

#### **Outfall 016 – Mainside Drainage – South**

Motor pool parking area (via oil/water separator). Fuel oil storage tanks inside secondary containment (via oil/water separator).

#### **Outfall 072 – Fuel Farm**

Various POL products, including diesel fuel and aviation fuel, are stored in aboveground storage tanks. All tanks are inside secondary containment areas, and the secondary containment areas drain through an oil/water separator.

#### **Outfall 721 – Fuel Farm**

Hydrostatic tank pressure test site.

#### **Outfall 073 – Landfill Pond**

Closed landfill.

#### **Outfall 074 – Landfill Marsh**

Closed landfill.

#### **Outfall 086 – Landfill Creek**

Closed landfill.

**Outfall 090 – Landfill Creek**

Closed landfill.

**Outfall 091 – Engine Test Pad**

Various POL products, including diesel fuel and aviation fuel, are stored in aboveground storage tanks. All tanks are inside secondary containment areas.

Attachment 2F.IV.C – Pollutant Sources  
Form 2F, Item IV Narrative Description of Pollutant Sources

Outfall Number	Control Measures and Treatment	Codes (see 2F-1)
007	Hazardous material storages are contained within building or using conex containers and flammable lockers. Diesel fuel above ground storage tanks were built using double walls and are self-confined. All other above ground storage tanks are confined in concrete berms and/or dikes.	
010	None.	
014	A catch basin at the wash rack has outlets to the storm sewer and sanitary Sewer. The valve to the storm sewer is closed during all washing operations.	
016	One oil/water separator treats stormwater discharges from the motor pool, and a second treats stormwater from the central heating plant, oil storage tank containment area, and the former coal storage yard. The discharge valve from each secondary containment area is normally closed. Accumulated precipitation is not released until it has been visually inspected for signs of contamination. The oil/water separator units receive periodic inspections and cleaning as outlined by the <i>Operations and Maintenance Manual for Process Wastewater Outfalls, Marine Corps Base Quantico</i> .	1-H, 1-U (Oil/Water separator treats part of flow)
072	A valve (normally closed) controls the discharge from each secondary containment area. Accumulated precipitation in the containment area is not released until it has been visually inspected for signs of contamination. An oil/water separator treats drainage and runoff from the tank farm, the vehicle loading/unloading area, and the aboveground storage tanks. This unit receives periodic inspections and cleaning as outlined by the <i>Operations and Maintenance Manual for Process Wastewater Outfalls, Marine Corps Base Quantico</i> .	1-H, 1-U (Oil/Water separator)
073	Stormwater runoff from the landfill enters a detention pond prior to discharge through the outfall.	1-U
074	Stormwater runoff from the landfill enters a detention pond prior to discharge through the outfall.	1-U
086	None.	
090	None.	
091	A concrete detention basin contains any spills in the engine test area. The discharge valve from the detention basin is normally closed. Accumulated precipitation in the detention basin is not released to a collection pond until it has been visually inspected for contamination.	

## Attachment 2F.V.B - Testing for Nonstormwater Discharges

### Form 2F, Item V Nonstormwater Discharges

Visual inspection, dye testing, and smoke testing have been used to identify non stormwater discharges to the outfalls in this Form 2F many times over the past ten years. This section describes several large-scale inspections in chronological order. This section does not list dye testing that has been conducted at Outfalls 073, 074, 075, 086 and 090 because these outfalls carry overland flow only, or at Outfalls 072 and 091 because all stormwater sources are known.

In 2010 and 2012, illicit discharge surveys were completed to identify any dry-weather discharges.

In 2014-2015, an investigation was initiated and completed to identify the cause on an illicit discharge that was affecting OF-035. The cause was determined to be water tank sanitizing practices that were the cause on an illicit discharge that was affecting OF-035.

**VII. Discharge Information**

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided.  
Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis – is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes (list all such pollutants below)

☒ No (go to Section IX)

**VIII. Biological Toxicity Testing Data**

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☒ Yes (list all such pollutants below)

☐ No (go to Section IX)

See Attached.

**IX. Contract Analysis Information**

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☒ Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

☐ No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
Universal Laboratories	20 Research Drive Hampton, VA 23666	800-695-2162	All except pH, Total Residual Chlorine, and Temperature

**X. Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (Type Or Print)

J.D. Provenzano III, Deputy, AC/S Installation Env Div

B. Area Code and Phone No.

703-432-0539

C. Signature

D. Date Signed

23 JUN 2016

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

EPA Form 3510-2F (1-92) Page VII-1 Continue on Reverse

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

**Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.**

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)

7. Provide a description of the method of flow measurement or estimate.

--

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

EPA Form 3510-2F (1-92) Page VII-1 Continue on Reverse



Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)

7. Provide a description of the method of flow measurement or estimate.

**Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.**

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Outfall No. 072  Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	ND	N/A			1	
Biological Oxygen Demand (BOD5)	<2.0 mg/l				1	
Chemical Oxygen Demand (COD)	ND				1	
Total Suspended Solids (TSS)	11.4 mg/l				1	
Total Nitrogen	0.48 mg/l				1	
Total Phosphorus	0.04 mg/l				1	
pH	Minimum 6.91	Maximum 6.91	Minimum	Maximum	1	

Outfall No. 072

Sources of Pollutants

[illegible]

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)

7. Provide a description of the method of flow measurement or estimate.

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	ND	N/A			1	
Biological Oxygen Demand (BOD5)	2.0 mg/l				1	
Chemical Oxygen Demand (COD)	ND				1	
Total Suspended Solids (TSS)	287.5 mg/l				1	
Total Nitrogen	0.48 mg/l				1	
Total Phosphorus	0.05 mg/l				1	
pH	Minimum 7.08	Maximum 7.08	Minimum	Maximum	1	

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

[illegible]

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)

7. Provide a description of the method of flow measurement or estimate.

--

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	ND	N/A			1	
Biological Oxygen Demand (BOD5)	4.0 mg/l				1	
Chemical Oxygen Demand (COD)	37.88 mg/l				1	
Total Suspended Solids (TSS)	101.6 mg/l				1	
Total Nitrogen	0.60 mg/l				1	
Total Phosphorus	0.06 mg/l				1	
pH	Minimum 6.96	Maximum 6.96	Minimum	Maximum	1	

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements

[illegible]

**Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.**

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

EPA Form 3510-2F (1-92) Page VII-1 Continue on Reverse

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)

7. Provide a description of the method of flow measurement or estimate.



Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

EPA Form 3510-2F (1-92) Page VII-1 Continue on Reverse

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D — Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)

7. Provide a description of the method of flow measurement or estimate.

Table 2F.VIII  
 MCB Quantico VPDES Permit Renewal  
 VPDES Permit No. VA 0002151

<b>Outfall 016</b>	<b>Acute 48 HR STAT Ceriodaphnia Dubia, TUa</b>	<b>Acute 48 HR STAT Pimephales Promelas, TUa</b>
Jan 1, 2013 to Mar 31, 2013	<1.00	<1.00
Apr 1, 2013 to Jun 30, 2013	<1.00	<1.00
July 1, 2013 to Sept 30, 2013	<1.00	<1.00
Oct 1, 2013 to Dec 31, 2013	<1.00	<1.00
Jan 1, 2014 to Mar 31, 2014	<1.00	<1.00
Apr 1, 2014 to Jun 30, 2014	<1.02	<1.00
July 1, 2014 to Sept 30, 2014	<1.00	<1.00
Oct 1, 2014 to Dec 31, 2014	<1.00	<1.00
Jan 1, 2015 to Mar 31, 2015	<1.00	<1.00
Apr 1, 2014 to Jun 30, 2015	<1.00	<1.00
July 1, 2015 to Sept 30, 2015	<1.00	<1.00
Oct 1, 2015 to Dec 31, 2015	<1.02	<1.00

**Table 2F-1**  
**MCB Quantico VPDES Permit Renewal**  
**VPDES Permit No. VA0002151**

A. Outfall Number (List)	B. Latitude			C. Longitude			D. Receiving Water (Name)
	1. Deg.	2. Min	3. Sec.	1. Deg.	2. Min.	3. Sec.	
007	38	30	54	-77	17	55	Unnamed tributary to Potomac River
010	38	30	54	-77	17	46	Unnamed tributary to Potomac River
014	38	30	36	-77	18	11	Unnamed tributary to Potomac River
016	38	30	47	-77	18	11	Unnamed tributary to Potomac River
072	38	31	26	-77	24	40	Unnamed tributary to Beaverdam Creek
721	38	31	26	-77	24	40	Unnamed tributary to Beaverdam Creek
073	38	31	16	-77	25	26	Unnamed tributary to Beaverdam Creek
074	38	31	23	-77	25	19	Unnamed tributary to Beaverdam Creek
086	38	31	31	-77	22	23	Unnamed tributary to Chopawamsic Creek
090	38	31	30	-77	22	6	Unnamed tributary to Chopawamsic Creek
091	38	30	13	-77	18	3	Unnamed tributary to Potomac River

Note: Outfalls No. 010, 014 and 030 have been deleted from the permit due to removal of industrial activities in their respective drainage basin areas.

Note: Outfall 721 is for hydrostatic tank pressure testing at the Fuel Farm. Not sampling was done at this outfall for the permit renewal application.

Table 2C.II-B  
MCB Quantico VPDES Permit Renewal  
VPDES Permit No. VA0002151

1. Outfall No. (list)	2. Operations (s) Contributing Flow		Treatment	
	a. Operation (list)	b. Average Flow (gallons per day)	a. Description	b. List Codes from Table 2C-1
003	<b>Mainside WTP<sup>1</sup></b>			
	a. Clarifier (2) Blowdown	4,236	1,2	U,E
	b. Backwashing of 7 dual media filters	52,000	1	U
	c. Stormwater	200	1	U
009	<b>NCO Swimming Pool</b>			
	a. Annual Pool Draining <sup>2</sup>	70,000	2	E
	b. Stormwater	100	4	A
010	<b>Mainside Drainage - North</b>			
	b. Stormwater	310,000	4	A
	c. NCCW	12,000	4	A
014	<b>HMX-1 Hangars and Maintenance</b>			
	a. Mechanical Room	1,000	4	A
	b. Stormwater	91,000	4	A
016	<b>Mainside Drainage-South</b>			
	a. Stormwater	760,000	1	H
	c. NCCW <sup>3</sup>	720	4	A
	d. Water softener backwash, CHP	71		
035	<b>HMX-1 Airfield BOQ</b>			
	b. Stormwater	15,300	4	A
	c. NCCW	4,320	4	A

<sup>1</sup> No regular discharge from this outfall as a result of water treatment plant operations has occurred since June 1997.

Notes: <sup>2</sup> Flow rate is held constant during the draining of the pool. Pool draining lasts for approx. 11 days.

<sup>3</sup> NCCW is discharged May through September each year.

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☒ YES (complete the following table)☐ NO (go to Section III)

1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		B. TOTAL VOLUME (specify with units)		C. DURATION (in days)
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
	PLEASE SEE TABLE 2C.II-C ON THE FOLLOWING PAGE							

## III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ YES (complete Item III-B)☒ NO (go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)? N/A

☐ YES (complete Item III-C)☐ NO (go to Section IV)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls. N/A

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (list outfall numbers)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	
N/A	N/A	N/A	N/A

## IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☐ YES (complete the following table)☒ NO (go to Item IV-B)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED
N/A	N/A	N/A	N/A	N/A	N/A

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

Table 2C.II-C  
 MCB Quantico VPDES Permit Renewal  
 VPDES Permit No. VA 0002151

1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (LIST)	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK (specific average)	b. MONTHS PER YEAR (specific average)	a. FLOW RATE (mgd)		b. TOTAL VOLUME (specific with units)		c. DURATION (in days)
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
003	Filter Backwash water/clarifier cleaning	Only discharges when WWTP can not accept flow due to an emergency. Very sporadic.						
009	NCO Swimming Pool - drained annually at season end in September	7 days/week	0.37 month/year	Flow rate held constant at 0.07 mgd		Approximatel y 750,000 gallons		11
016	Non-Contact Cooling Water	7 days/week	6 month/year	0.0007	0.0007	0.13 mgal	0.13 mgal	182

CONTINUED FROM PAGE 2

## V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, &amp; C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
N/A	N/A	N/A	N/A

## VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☒ YES (list all such pollutants below )☐ NO (go to Item VI-B)

The following chemicals are used to treat noncontact cooling water. Cooling tower water is treated to prevent and control corrosion and microbial growth.

Sodium Hydroxide  
Methylene Phosphonic Acid  
SodiumPolyacrylate  
Poly(maleic acid)  
Ethylenediamine Tetracetic Acid, Tetrasodium Salt  
Potassium Hydroxide  
2-(Thiocyanomethylthio)benzothiazole  
Diethylene Glycol Monomethylether



PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.  
SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

VA0002151

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)											OUTFALL NO. 003	
PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.												
1. POLLUTANT	2. EFFLUENT							3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Organic Carbon (TOC)												
d. Total Suspended Solids (TSS)	ND							mg/l				
e. Ammonia (as N)												
f. Flow	VALUE 0		VALUE		VALUE					VALUE		
g. Temperature (winter)	VALUE		VALUE		VALUE			°C		VALUE		
h. Temperature (summer)	VALUE		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM				STANDARD UNITS				

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
a. Bromide (24959-67-9)		X												
b. Chlorine, Total Residual		X												
c. Color		X												
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)		X												
f. Nitrate-Nitrite (as N)		X												

## ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)		X												
h. Oil and Grease		X												
i. Phosphorus (as P), Total (7723-14-0)		X												
j. Radioactivity														
(1) Alpha, Total		X												
(2) Beta, Total		X												
(3) Radium, Total		X												
(4) Radium 226, Total		X												
k. Sulfate (as SO <sub>4</sub> ) (14808-79-8)		X												
l. Sulfide (as S)		X												
m. Sulfite (as SO <sub>3</sub> ) (14265-45-3)		X												
n. Surfactants		X												
o. Aluminum, Total (7429-90-5)		X												
p. Barium, Total (7440-39-3)		X												
q. Boron, Total (7440-42-8)		X												
r. Cobalt, Total (7440-48-4)		X												
s. Iron, Total (7439-89-6)		X												
t. Magnesium, Total (7439-95-4)		X												
u. Molybdenum, Total (7439-98-7)		X												
v. Manganese, Total (7439-96-5)		X												
w. Tin, Total (7440-31-5)		X												
x. Titanium, Total (7440-32-6)		X												

EPA I.D. NUMBER (copy from Item 1 of Form 1)

OUTFALL NUMBER

VA0002151

003

CONTINUED FROM PAGE 3 OF FORM 2-C

**PART C** - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (*all 7 pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
<b>METALS, CYANIDE, AND TOTAL PHENOLS</b>																
1M. Antimony, Total (7440-36-0)			X													
2M. Arsenic, Total (7440-38-2)			X													
3M. Beryllium, Total (7440-41-7)			X													
4M. Cadmium, Total (7440-43-9)			X													
5M. Chromium, Total (7440-47-3)			X													
6M. Copper, Total (7440-50-8)			X													
7M. Lead, Total (7439-92-1)			X													
8M. Mercury, Total (7439-97-6)			X													
9M. Nickel, Total (7440-02-0)			X													
10M. Selenium, Total (7782-49-2)			X													
11M. Silver, Total (7440-22-4)			X													
12M. Thallium, Total (7440-28-0)			X													
13M. Zinc, Total (7440-66-6)			X													
14M. Cyanide, Total (57-12-5)			X													
15M. Phenols, Total			X													
<b>DIOXIN</b>																
2,3,7,8-Tetra- chlorodibenzo-P- Dioxin (1764-01-6)			X	DESCRIBE RESULTS												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE	b. NO. OF ANALYSES		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION – VOLATILE COMPOUNDS																
1V. Accrolein (107-02-8)			X													
2V. Acrylonitrile (107-13-1)			X													
3V. Benzene (71-43-2)			X													
4V. Bis (Chloro- methyl) Ether (542-88-1)			X													
5V. Bromoform (75-25-2)			X													
6V. Carbon Tetrachloride (56-23-5)			X													
7V. Chlorobenzene (108-90-7)			X													
8V. Chlorodi- bromomethane (124-48-1)			X													
9V. Chloroethane (75-00-3)			X													
10V. 2-Chloro- ethylvinyl Ether (110-75-8)			X													
11V. Chloroform (67-66-3)			X													
12V. Dichloro- bromomethane (75-27-4)			X													
13V. Dichloro- difluoromethane (75-71-8)			X													
14V. 1,1-Dichloro- ethane (75-34-3)			X													
15V. 1,2-Dichloro- ethane (107-06-2)			X													
16V. 1,1-Dichloro- ethylene (75-35-4)			X													
17V. 1,2-Dichloro- propane (78-87-5)			X													
18V. 1,3-Dichloro- propylene (542-75-6)			X													
19V. Ethylbenzene (100-41-4)			X													
20V. Methyl Bromide (74-83-9)			X													
21V. Methyl Chloride (74-87-3)			X													



CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION – VOLATILE COMPOUNDS (continued)																
22V. Methylene Chloride (75-09-2)			X													
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X													
24V. Tetrachloroethylene (127-18-4)			X													
25V. Toluene (108-88-3)			X													
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X													
27V. 1,1,1-Trichloroethane (71-55-6)			X													
28V. 1,1,2-Trichloroethane (79-00-5)			X													
29V Trichloroethylene (79-01-6)			X													
30V. Trichlorofluoromethane (75-69-4)			X													
31V. Vinyl Chloride (75-01-4)			X													
GC/MS FRACTION – ACID COMPOUNDS																
1A. 2-Chlorophenol (95-57-8)			X													
2A. 2,4-Dichlorophenol (120-83-2)			X													
3A. 2,4-Dimethylphenol (105-67-9)			X													
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X													
5A. 2,4-Dinitrophenol (51-28-5)			X													
6A. 2-Nitrophenol (88-75-5)			X													
7A. 4-Nitrophenol (100-02-7)			X													
8A. P-Chloro-M-Cresol (59-50-7)			X													
9A. Pentachlorophenol (87-86-5)			X													
10A. Phenol (108-95-2)			X													
11A. 2,4,6-Trichlorophenol (88-05-2)			X													

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS																
1B. Acenaphthene (83-32-9)			X													
2B. Acenaphthylene (208-96-8)			X													
3B. Anthracene (120-12-7)			X													
4B. Benzidine (92-87-5)			X													
5B. Benzo (a) Anthracene (56-55-3)			X													
6B. Benzo (a) Pyrene (50-32-8)			X													
7B. 3,4-Benzo- fluoranthene (205-99-2)			X													
8B. Benzo (ghi) Perylene (191-24-2)			X													
9B. Benzo (k) Fluoranthene (207-08-9)			X													
10B. Bis (2-Chloro- ethoxy) Methane (111-91-1)			X													
11B. Bis (2-Chloro- ethyl) Ether (111-44-4)			X													
12B. Bis (2- Chloroisopropyl) Ether (102-80-1)			X													
13B. Bis (2-Ethyl- hexyl) Phthalate (117-81-7)			X													
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X													
15B. Butyl Benzyl Phthalate (85-68-7)			X													
16B. 2-Chloro- naphthalene (91-58-7)			X													
17B. 4-Chloro- phenyl Phenyl Ether (7005-72-3)			X													
18B. Chrysene (218-01-9)			X													
19B. Dibenzo (a,h) Anthracene (53-70-3)			X													
20B. 1,2-Dichloro- benzene (95-50-1)			X													
21B. 1,3-Di-chloro- benzene (541-73-1)			X													

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)							
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS		a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES					
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS						
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)																					
22B. 1,4-Dichloro- benzene (106-46-7)			X																		
23B. 3,3-Dichloro- benzidine (91-94-1)			X																		
24B. Diethyl Phthalate (84-66-2)			X																		
25B. Dimethyl Phthalate (131-11-3)			X																		
26B. Di-N-Butyl Phthalate (84-74-2)			X																		
27B. 2,4-Dinitro- toluene (121-14-2)			X																		
28B. 2,6-Dinitro- toluene (606-20-2)			X																		
29B. Di-N-Octyl Phthalate (117-84-0)			X																		
30B. 1,2-Diphenyl- hydrazine (as Azo- benzene) (122-66-7)			X																		
31B. Fluoranthene (206-44-0)			X																		
32B. Fluorene (86-73-7)			X																		
33B. Hexachloro- benzene (118-74-1)			X																		
34B. Hexachloro- butadiene (87-68-3)			X																		
35B. Hexachloro- cyclopentadiene (77-47-4)			X																		
36B Hexachloro- ethane (67-72-1)			X																		
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X																		
38B. Isophorone (78-59-1)			X																		
39B. Naphthalene (81-20-3)			X																		
40B. Nitrobenzene (98-95-3)			X																		
41B. N-Nitro- sodimethylamine (62-75-9)			X																		
42B. N-Nitrosodi- N-Propylamine (621-64-7)			X																		

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
																(1) CONCENTRATION
GC/MS FRACTION -- BASE/NEUTRAL COMPOUNDS (continued)																
43B. N-Nitro- sodiphenylamine (86-30-6)			X													
44B. Phenanthrene (85-01-8)			X													
45B. Pyrene (129-00-0)			X													
46B. 1,2,4-Tri- chlorobenzene (120-82-1)			X													
GC/MS FRACTION -- PESTICIDES																
1P. Aldrin (309-00-2)			X													
2P. α-BHC (319-84-6)			X													
3P. β-BHC (319-85-7)			X													
4P. γ-BHC (58-89-9)			X													
5P. δ-BHC (319-86-8)			X													
6P. Chlordane (57-74-9)			X													
7P. 4,4'-DDT (50-29-3)			X													
8P. 4,4'-DDE (72-55-9)			X													
9P. 4,4'-DDD (72-54-8)			X													
10P. Dieldrin (60-57-1)			X													
11P. α-Endosulfan (115-29-7)			X													
12P. β-Endosulfan (115-29-7)			X													
13P. Endosulfan Sulfate (1031-07-8)			X													
14P. Endrin (72-20-8)			X													
15P. Endrin Aldehyde (7421-93-4)			X													
16P. Heptachlor (76-44-8)			X													



EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
VA0002151	003

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS			
GC/MS FRACTION – PESTICIDES (continued)																	
17P. Heptachlor Epoxide (1024-57-3)			X														
18P. PCB-1242 (53469-21-9)			X														
19P. PCB-1254 (11097-69-1)			X														
20P. PCB-1221 (11104-28-2)			X														
21P. PCB-1232 (11141-16-5)			X														
22P. PCB-1248 (12672-29-6)			X														
23P. PCB-1260 (11096-82-5)			X														
24P. PCB-1016 (12674-11-2)			X														
25P. Toxaphene (8001-35-2)			X														

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.  
SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

VA0002151

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)	OUTFALL NO. 009
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PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT							3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	4						1	mg/l				
b. Chemical Oxygen Demand (COD)	ND						1	mg/l				
c. Total Organic Carbon (TOC)	5.81						1	mg/l				
d. Total Suspended Solids (TSS)	71.6						1	mg/l				
e. Ammonia (as N)	1.54						1	mg/l				
f. Flow	VALUE 0.0023 MGD		VALUE		VALUE		1			VALUE		
g. Temperature (winter)	VALUE		VALUE		VALUE			°C		VALUE		
h. Temperature (summer)	VALUE 17.2		VALUE		VALUE		1	°C		VALUE		
i. pH	MINIMUM 6.89	MAXIMUM 6.89	MINIMUM	MAXIMUM			1	STANDARD UNITS				

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. <i>(if available)</i>	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE <i>(optional)</i>		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)		X												
b. Chlorine, Total Residual	X		0.00						1	mg/l				
c. Color		X												
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)		X												
f. Nitrate-Nitrite (as N)		X												

## ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)		X												
h. Oil and Grease		X												
i. Phosphorus (as P), Total (7723-14-0)		X												
j. Radioactivity														
(1) Alpha, Total		X												
(2) Beta, Total		X												
(3) Radium, Total		X												
(4) Radium 226, Total		X												
k. Sulfate (as SO <sub>4</sub> ) (14808-79-8)		X												
l. Sulfide (as S)		X												
m. Sulfite (as SO <sub>3</sub> ) (14265-45-3)		X												
n. Surfactants		X												
o. Aluminum, Total (7429-90-5)		X												
p. Barium, Total (7440-39-3)		X												
q. Boron, Total (7440-42-8)		X												
r. Cobalt, Total (7440-48-4)		X												
s. Iron, Total (7439-89-6)		X												
t. Magnesium, Total (7439-95-4)		X												
u. Molybdenum, Total (7439-98-7)		X												
v. Manganese, Total (7439-96-5)		X												
w. Tin, Total (7440-31-5)		X												
x. Titanium, Total (7440-32-6)		X												

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CONTINUED FROM PAGE 3 OF FORM 2-C

**PART C -** If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (*all 7 pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
																(1) CONCENTRATION
<b>METALS, CYANIDE, AND TOTAL PHENOLS</b>																
1M. Antimony, Total (7440-36-0)			X													
2M. Arsenic, Total (7440-38-2)			X													
3M. Beryllium, Total (7440-41-7)			X													
4M. Cadmium, Total (7440-43-9)			X													
5M. Chromium, Total (7440-47-3)			X													
6M. Copper, Total (7440-50-8)			X													
7M. Lead, Total (7439-92-1)			X													
8M. Mercury, Total (7439-97-6)			X													
9M. Nickel, Total (7440-02-0)			X													
10M. Selenium, Total (7782-49-2)			X													
11M. Silver, Total (7440-22-4)			X													
12M. Thallium, Total (7440-28-0)			X													
13M. Zinc, Total (7440-66-6)			X													
14M. Cyanide, Total (57-12-5)			X													
15M. Phenols, Total			X													
<b>DIOXIN</b>																
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)			X	DESCRIBE RESULTS												



CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS			
GC/MS FRACTION – VOLATILE COMPOUNDS																	
1V. Accrolein (107-02-8)			X														
2V. Acrylonitrile (107-13-1)			X														
3V. Benzene (71-43-2)			X														
4V. Bis (Chloro- methyl) Ether (542-88-1)			X														
5V. Bromoform (75-25-2)			X														
6V. Carbon Tetrachloride (56-23-5)			X														
7V. Chlorobenzene (108-90-7)			X														
8V. Chlorodi- bromomethane (124-48-1)			X														
9V. Chloroethane (75-00-3)			X														
10V. 2-Chloro- ethylvinyl Ether (110-75-8)			X														
11V. Chloroform (67-66-3)			X														
12V. Dichloro- bromomethane (75-27-4)			X														
13V. Dichloro- difluoromethane (75-71-8)			X														
14V. 1,1-Dichloro- ethane (75-34-3)			X														
15V. 1,2-Dichloro- ethane (107-06-2)			X														
16V. 1,1-Dichloro- ethylene (75-35-4)			X														
17V. 1,2-Dichloro- propane (78-87-5)			X														
18V. 1,3-Dichloro- propylene (542-75-6)			X														
19V. Ethylbenzene (100-41-4)			X														
20V. Methyl Bromide (74-83-9)			X														
21V. Methyl Chloride (74-87-3)			X														

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			X												
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X												
24V. Tetrachloroethylene (127-18-4)			X												
25V. Toluene (108-88-3)			X												
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X												
27V. 1,1,1-Trichloroethane (71-55-6)			X												
28V. 1,1,2-Trichloroethane (79-00-5)			X												
29V Trichloroethylene (79-01-6)			X												
30V. Trichlorofluoromethane (75-69-4)			X												
31V. Vinyl Chloride (75-01-4)			X												
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			X												
2A. 2,4-Dichlorophenol (120-83-2)			X												
3A. 2,4-Dimethylphenol (105-67-9)			X												
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X												
5A. 2,4-Dinitrophenol (51-28-5)			X												
6A. 2-Nitrophenol (88-75-5)			X												
7A. 4-Nitrophenol (100-02-7)			X												
8A. P-Chloro-M-Cresol (59-50-7)			X												
9A. Pentachlorophenol (87-86-5)			X												
10A. Phenol (108-95-2)			X												
11A. 2,4,6-Trichlorophenol (88-05-2)			X												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			X												
2B. Acenaphthylene (208-96-8)			X												
3B. Anthracene (120-12-7)			X												
4B. Benzidine (92-87-5)			X												
5B. Benzo (a) Anthracene (56-55-3)			X												
6B. Benzo (a) Pyrene (50-32-8)			X												
7B. 3,4-Benzo-fluoranthene (205-99-2)			X												
8B. Benzo (ghi) Perylene (191-24-2)			X												
9B. Benzo (k) Fluoranthene (207-08-9)			X												
10B. Bis (2-Chloro-ethoxy) Methane (111-91-1)			X												
11B. Bis (2-Chloro-ethyl) Ether (111-44-4)			X												
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)			X												
13B. Bis (2-Ethyl-hexyl) Phthalate (117-81-7)			X												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X												
15B. Butyl Benzyl Phthalate (85-68-7)			X												
16B. 2-Chloro-naphthalene (91-58-7)			X												
17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3)			X												
18B. Chrysene (218-01-9)			X												
19B. Dibenzo (a,h) Anthracene (53-70-3)			X												
20B. 1,2-Dichloro-benzene (95-50-1)			X												
21B. 1,3-Di-chloro-benzene (541-73-1)			X												

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS			
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)																	
22B. 1,4-Dichloro- benzene (106-46-7)			X														
23B. 3,3-Dichloro- benzidine (91-94-1)			X														
24B. Diethyl Phthalate (84-66-2)			X														
25B. Dimethyl Phthalate (131-11-3)			X														
26B. Di-N-Butyl Phthalate (84-74-2)			X														
27B. 2,4-Dinitro- toluene (121-14-2)			X														
28B. 2,6-Dinitro- toluene (606-20-2)			X														
29B. Di-N-Octyl Phthalate (117-84-0)			X														
30B. 1,2-Diphenyl- hydrazine (as Azo- benzene) (122-66-7)			X														
31B. Fluoranthene (206-44-0)			X														
32B. Fluorene (86-73-7)			X														
33B. Hexachloro- benzene (118-74-1)			X														
34B. Hexachloro- butadiene (87-68-3)			X														
35B. Hexachloro- cyclopentadiene (77-47-4)			X														
36B Hexachloro- ethane (67-72-1)			X														
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X														
38B. Isophorone (78-59-1)			X														
39B. Naphthalene (91-20-3)			X														
40B. Nitrobenzene (98-95-3)			X														
41B. N-Nitro- sodimethylamine (62-75-9)			X														
42B. N-Nitrosodi- N-Propylamine (621-64-7)			X														

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)																
43B. N-Nitro- sodiphenylamine (86-30-6)			X													
44B. Phenanthrene (85-01-8)			X													
45B. Pyrene (129-00-0)			X													
46B. 1,2,4-Tri- chlorobenzene (120-82-1)			X													
GC/MS FRACTION – PESTICIDES																
1P. Aldrin (309-00-2)			X													
2P. α-BHC (319-84-6)			X													
3P. β-BHC (319-85-7)			X													
4P. γ-BHC (58-89-9)			X													
5P. δ-BHC (319-86-8)			X													
6P. Chlordane (57-74-9)			X													
7P. 4,4'-DDT (50-29-3)			X													
8P. 4,4'-DDE (72-55-9)			X													
9P. 4,4'-DDD (72-54-8)			X													
10P. Dieldrin (60-57-1)			X													
11P. α-Endosulfan (115-29-7)			X													
12P. β-Endosulfan (115-29-7)			X													
13P. Endosulfan Sulfate (1031-07-8)			X													
14P. Endrin (72-20-8)			X													
15P. Endrin Aldehyde (7421-93-4)			X													
16P. Heptachlor (76-44-8)			X													



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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION - PESTICIDES (continued)																
17P. Heptachlor Epoxide (1024-57-3)			X													
18P. PCB-1242 (53469-21-9)			X													
19P. PCB-1254 (11097-69-1)			X													
20P. PCB-1221 (11104-28-2)			X													
21P. PCB-1232 (11141-16-5)			X													
22P. PCB-1248 (12672-29-6)			X													
23P. PCB-1260 (11096-82-5)			X													
24P. PCB-1016 (12674-11-2)			X													
25P. Toxaphene (8001-35-2)			X													

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.  
SEE INSTRUCTIONS.

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V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)	OUTFALL NO. 016
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PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
	CONCENTRATION	MASS	CONCENTRATION	MASS	CONCENTRATION	MASS				CONCENTRATION	MASS	
a. Biochemical Oxygen Demand (BOD)	<2						1	mg/l				
b. Chemical Oxygen Demand (COD)	26.34						1	mg/l				
c. Total Organic Carbon (TOC)	9.74						1	mg/l				
d. Total Suspended Solids (TSS)	18.1						1	mg/l				
e. Ammonia (as N)	0.24						1	mg/l				
f. Flow	VALUE 0.0011 MGD		VALUE		VALUE		1			VALUE		
g. Temperature (winter)	VALUE		VALUE		VALUE			°C		VALUE		
h. Temperature (summer)	VALUE 18.0		VALUE		VALUE		1	°C		VALUE		
i. pH	MINIMUM 6.81	MAXIMUM 6.81	MINIMUM	MAXIMUM			1	STANDARD UNITS				

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
			CONCENTRATION	MASS	CONCENTRATION	MASS	CONCENTRATION	MASS				CONCENTRATION	MASS	
a. Bromide (24959-67-9)		X												
b. Chlorine, Total Residual	X		0.00						1	mg/l				
c. Color		X												
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)		X												
f. Nitrate-Nitrite (as N)	X		0.25						1	mg/l				

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION -- BASE/NEUTRAL COMPOUNDS (continued)																
22B. 1,4-Dichlorobenzene (106-46-7)		X		ND						1	ug/l					
23B. 3,3-Dichlorobenzidine (91-94-1)		X		ND						1	ug/l					
24B. Diethyl Phthalate (84-66-2)		X		ND						1	ug/l					
25B. Dimethyl Phthalate (131-11-3)		X		ND						1	ug/l					
26B. Di-N-Butyl Phthalate (84-74-2)		X		ND						1	ug/l					
27B. 2,4-Dinitrotoluene (121-14-2)		X		ND						1	ug/l					
28B. 2,6-Dinitrotoluene (606-20-2)		X		ND						1	ug/l					
29B. Di-N-Octyl Phthalate (117-84-0)		X		ND						1	ug/l					
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)		X		ND						1	ug/l					
31B. Fluoranthene (206-44-0)		X		ND						1	ug/l					
32B. Fluorene (86-73-7)		X		ND						1	ug/l					
33B. Hexachlorobenzene (118-74-1)		X		ND						1	ug/l					
34B. Hexachlorobutadiene (87-68-3)		X		ND						1	ug/l					
35B. Hexachlorocyclopentadiene (77-47-4)		X		ND						1	ug/l					
36B Hexachloroethane (67-72-1)		X		ND						1	ug/l					
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)		X		ND						1	ug/l					
38B. Isophorone (78-59-1)		X		ND						1	ug/l					
39B. Naphthalene (91-20-3)		X		ND						1	ug/l					
40B. Nitrobenzene (98-95-3)		X		ND						1	ug/l					
41B. N-Nitrosodimethylamine (62-75-9)		X		ND						1	ug/l					
42B. N-Nitrosodi-N-Propylamine (621-64-7)		X		ND						1	ug/l					

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OUTFALL NUMBER

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CONTINUED FROM PAGE 3 OF FORM 2-C

**PART C** - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (*all 7 pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
																(1) CONCENTRATION
<b>METALS, CYANIDE, AND TOTAL PHENOLS</b>																
1M. Antimony, Total (7440-36-0)			X													
2M. Arsenic, Total (7440-38-2)			X													
3M. Beryllium, Total (7440-41-7)			X													
4M. Cadmium, Total (7440-43-9)			X													
5M. Chromium, Total (7440-47-3)			X													
6M. Copper, Total (7440-50-8)		X		ND						1	mg/l					
7M. Lead, Total (7439-92-1)		X		ND						1	mg/l					
8M. Mercury, Total (7439-97-6)			X													
9M. Nickel, Total (7440-02-0)			X													
10M. Selenium, Total (7782-49-2)			X													
11M. Silver, Total (7440-22-4)			X													
12M. Thallium, Total (7440-28-0)			X													
13M. Zinc, Total (7440-66-6)		X		0.029						1	mg/l					
14M. Cyanide, Total (57-12-5)			X													
15M. Phenols, Total			X													
<b>DIOXIN</b>																
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)			X	DESCRIBE RESULTS												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION – VOLATILE COMPOUNDS																
1V. Accrolein (107-02-8)			X													
2V. Acrylonitrile (107-13-1)			X													
3V. Benzene (71-43-2)			X													
4V. Bis (Chloro- methyl) Ether (542-88-1)			X													
5V. Bromoform (75-25-2)			X													
6V. Carbon Tetrachloride (56-23-5)			X													
7V. Chlorobenzene (108-90-7)			X													
8V. Chlorodi- bromomethane (124-48-1)			X													
9V. Chloroethane (75-00-3)			X													
10V. 2-Chloro- ethylvinyl Ether (110-75-8)			X													
11V. Chloroform (67-66-3)			X													
12V. Dichloro- bromomethane (75-27-4)			X													
13V. Dichloro- difluoromethane (75-71-8)			X													
14V. 1,1-Dichloro- ethane (75-34-3)			X													
15V. 1,2-Dichloro- ethane (107-06-2)			X													
16V. 1,1-Dichloro- ethylene (75-35-4)			X													
17V. 1,2-Dichloro- propane (78-87-5)			X													
18V. 1,3-Dichloro- propylene (542-75-6)			X													
19V. Ethylbenzene (100-41-4)			X													
20V. Methyl Bromide (74-83-9)			X													
21V. Methyl Chloride (74-87-3)			X													

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			X												
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X												
24V. Tetrachloroethylene (127-18-4)			X												
25V. Toluene (108-88-3)			X												
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X												
27V. 1,1,1-Trichloroethane (71-55-6)			X												
28V. 1,1,2-Trichloroethane (79-00-5)			X												
29V. Trichloroethylene (79-01-6)			X												
30V. Trichlorofluoromethane (75-69-4)			X												
31V. Vinyl Chloride (75-01-4)			X												
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)		X		ND						1	ug/l				
2A. 2,4-Dichlorophenol (120-83-2)		X		ND						1	ug/l				
3A. 2,4-Dimethylphenol (105-67-9)		X		ND						1	ug/l				
4A. 4,6-Dinitro-O-Cresol (534-52-1)		X		ND						1	ug/l				
5A. 2,4-Dinitrophenol (51-28-5)		X		ND						1	ug/l				
6A. 2-Nitrophenol (88-75-5)		X		ND						1	ug/l				
7A. 4-Nitrophenol (100-02-7)		X		ND						1	ug/l				
8A. P-Chloro-M-Cresol (59-50-7)		X		ND						1	ug/l				
9A. Pentachlorophenol (87-86-5)		X		ND						1	ug/l				
10A. Phenol (108-95-2)			X												
11A. 2,4,6-Trichlorophenol (88-05-2)		X		ND						1	ug/l				



CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS																
1B. Acenaphthene (83-32-9)		X		ND						1	ug/l					
2B. Acenaphthylene (208-96-8)		X		ND						1	ug/l					
3B. Anthracene (120-12-7)		X		ND						1	ug/l					
4B. Benzidine (92-87-5)		X		ND						1	ug/l					
5B. Benzo (a) Anthracene (56-55-3)		X		ND						1	ug/l					
6B. Benzo (a) Pyrene (50-32-8)		X		ND						1	ug/l					
7B. 3,4-Benzo- fluoranthene (205-99-2)		X		ND						1	ug/l					
8B. Benzo (ghi) Perylene (191-24-2)		X		ND						1	ug/l					
9B. Benzo (k) Fluoranthene (207-08-9)		X		ND						1	ug/l					
10B. Bis (2-Chloro- ethoxy) Methane (111-91-1)		X		ND						1	ug/l					
11B. Bis (2-Chloro- ethyl) Ether (111-44-4)		X		ND						1	ug/l					
12B. Bis (2- Chloroisopropyl) Ether (102-80-1)		X		ND						1	ug/l					
13B. Bis (2-Ethyl- hexyl) Phthalate (117-81-7)		X		ND						1	ug/l					
14B. 4-Bromophenyl Phenyl Ether (101-55-3)		X		ND						1	ug/l					
15B. Butyl Benzyl Phthalate (85-68-7)		X		ND						1	ug/l					
16B. 2-Chloro- naphthalene (91-58-7)		X		ND						1	ug/l					
17B. 4-Chloro- phenyl Phenyl Ether (7005-72-3)		X		ND						1	ug/l					
18B. Chrysene (218-01-9)		X		ND						1	ug/l					
19B. Dibenzo (a,h) Anthracene (53-70-3)		X		ND						1	ug/l					
20B. 1,2-Dichloro- benzene (95-50-1)		X		ND						1	ug/l					
21B. 1,3-Di-chloro- benzene (541-73-1)		X		ND						1	ug/l					

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)		
				CONCENTRATION	MASS	CONCENTRATION	MASS	CONCENTRATION	MASS				CONCENTRATION	MASS		
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)																
22B. 1,4-Dichlorobenzene (106-46-7)		X		ND						1	ug/l					
23B. 3,3-Dichlorobenzidine (91-94-1)		X		ND						1	ug/l					
24B. Diethyl Phthalate (84-66-2)		X		ND						1	ug/l					
25B. Dimethyl Phthalate (131-11-3)		X		ND				q		1	ug/l					
26B. Di-N-Butyl Phthalate (84-74-2)		X		ND						1	ug/l					
27B. 2,4-Dinitrotoluene (121-14-2)		X		ND						1	ug/l					
28B. 2,6-Dinitrotoluene (606-20-2)		X		ND						1	ug/l					
29B. Di-N-Octyl Phthalate (117-84-0)		X		ND						1	ug/l					
30B. 1,2-Diphenylhydrazine (as Azo-benzene) (122-66-7)		X		ND						1	ug/l					
31B. Fluoranthene (206-44-0)		X		ND						1	ug/l					
32B. Fluorene (86-73-7)		X		ND						1	ug/l					
33B. Hexachlorobenzene (118-74-1)		X		ND						1	ug/l					
34B. Hexachlorobutadiene (87-68-3)		X		ND						1	ug/l					
35B. Hexachlorocyclopentadiene (77-47-4)		X		ND						1	ug/l					
36B Hexachloroethane (67-72-1)		X		ND						1	ug/l					
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)		X		ND						1	ug/l					
38B. Isophorone (78-59-1)		X		ND						1	ug/l					
39B. Naphthalene (91-20-3)		X		ND						1	ug/l					
40B. Nitrobenzene (98-95-3)		X		ND						1	ug/l					
41B. N-Nitrosodimethylamine (62-75-9)		X		ND						1	ug/l					
42B. N-Nitrosodi-N-Propylamine (621-64-7)		X		ND						1	ug/l					

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS			
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)																	
43B. N-Nitrosodiphenylamine (86-30-6)		X		ND						1	ug/l						
44B. Phenanthrene (85-01-8)		X		ND						1	ug/l						
45B. Pyrene (129-00-0)		X		ND						1	ug/l						
46B. 1,2,4-Trichlorobenzene (120-82-1)		X		ND						1	ug/l						
GC/MS FRACTION – PESTICIDES																	
1P. Aldrin (309-00-2)			X														
2P. α-BHC (319-84-6)			X														
3P. β-BHC (319-85-7)			X														
4P. γ-BHC (58-89-9)			X														
5P. δ-BHC (319-86-8)			X														
6P. Chlordane (57-74-9)			X														
7P. 4,4'-DDT (50-29-3)			X														
8P. 4,4'-DDE (72-55-9)			X														
9P. 4,4'-DDD (72-54-8)			X														
10P. Dieldrin (60-57-1)			X														
11P. α-Endosulfan (115-29-7)			X														
12P. β-Endosulfan (115-29-7)			X														
13P. Endosulfan Sulfate (1031-07-8)			X														
14P. Endrin (72-20-8)			X														
15P. Endrin Aldehyde (7421-93-4)			X														
16P. Heptachlor (76-44-8)			X														

EPA I.D. NUMBER <i>(copy from Item 1 of Form 1)</i>	OUTFALL NUMBER
VA0002151	016

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE <i>(optional)</i>		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE <i>(if available)</i>		c. LONG TERM AVRG. VALUE <i>(if available)</i>		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION – PESTICIDES <i>(continued)</i>																
17P. Heptachlor Epoxide (1024-57-3)			X													
18P. PCB-1242 (53469-21-9)			X													
19P. PCB-1254 (11097-69-1)			X													
20P. PCB-1221 (11104-28-2)			X													
21P. PCB-1232 (11141-16-5)			X													
22P. PCB-1248 (12672-29-6)			X													
23P. PCB-1260 (11096-82-5)			X													
24P. PCB-1016 (12674-11-2)			X													
25P. Toxaphene (8001-35-2)			X													

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.  
SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

VA0002151

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO.

035

PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1)	(2)	(1)	(2)	(1)	(2)				(1)	(2)	
	CONCENTRATION	MASS	CONCENTRATION	MASS	CONCENTRATION	MASS				CONCENTRATION	MASS	
a. Biochemical Oxygen Demand (BOD)	<2						1	mg/l				
b. Chemical Oxygen Demand (COD)	ND						1	mg/l				
c. Total Organic Carbon (TOC)	4.22						1	mg/l				
d. Total Suspended Solids (TSS)	3.9						1	mg/l				
e. Ammonia (as N)	ND						1	mg/l				
f. Flow	VALUE 0.0033 MGD		VALUE		VALUE		1			VALUE		
g. Temperature (winter)	VALUE		VALUE		VALUE			°C		VALUE		
h. Temperature (summer)	VALUE 18.3		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM 7.16	MAXIMUM 7.16	MINIMUM	MAXIMUM			1	STANDARD UNITS				

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)		X												
b. Chlorine, Total Residual	X		0.00						1	mg/l				
c. Color		X												
d. Fecal Coliform	X		106						1	cfu				
e. Fluoride (16984-48-8)		X												
f. Nitrate-Nitrite (as N)	X		.45						1	mg/l				

## ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT								4. UNITS		5. INTAKE (optional)					
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES				
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS					
g. Nitrogen, Total Organic (as N)		X																
h. Oil and Grease	X		ND						1	mg/l								
i. Phosphorus (as P), Total (7723-14-0)	X		0.14						1	mg/l								
j. Radioactivity																		
(1) Alpha, Total		X																
(2) Beta, Total		X																
(3) Radium, Total		X																
(4) Radium 226, Total		X																
k. Sulfate (as SO <sub>4</sub> ) (14808-79-8)	X		20.3						1	mg/l								
l. Sulfide (as S)		X																
m. Sulfite (as SO <sub>3</sub> ) (14265-45-3)		X																
n. Surfactants	X		ND						1	mg/l								
o. Aluminum, Total (7429-90-5)		X																
p. Barium, Total (7440-39-3)	X		0.107						1	mg/l								
q. Boron, Total (7440-42-8)		X																
r. Cobalt, Total (7440-48-4)		X																
s. Iron, Total (7439-89-6)	X		0.46						1	mg/l								
t. Magnesium, Total (7439-95-4)		X																
u. Molybdenum, Total (7439-98-7)		X																
v. Manganese, Total (7439-96-5)		X																
w. Tin, Total (7440-31-5)		X																
x. Titanium, Total (7440-32-6)		X																



EPA I.D. NUMBER (copy from Item 1 of Form 1)

OUTFALL NUMBER

VA0002151

030

CONTINUED FROM PAGE 3 OF FORM 2-C

**PART C -** If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (*all 7 pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
																(1) CONCENTRATION
<b>METALS, CYANIDE, AND TOTAL PHENOLS</b>																
1M. Antimony, Total (7440-36-0)			X													
2M. Arsenic, Total (7440-38-2)			X													
3M. Beryllium, Total (7440-41-7)			X													
4M. Cadmium, Total (7440-43-9)		X		ND						1	mg/l					
5M. Chromium, Total (7440-47-3)			X													
6M. Copper, Total (7440-50-8)			X													
7M. Lead, Total (7439-92-1)			X													
8M. Mercury, Total (7439-97-6)			X													
9M. Nickel, Total (7440-02-0)			X													
10M. Selenium, Total (7782-49-2)			X													
11M. Silver, Total (7440-22-4)			X													
12M. Thallium, Total (7440-28-0)			X													
13M. Zinc, Total (7440-66-6)			X													
14M. Cyanide, Total (57-12-5)			X													
15M. Phenols, Total		X		ND						1	mg/l					
<b>DIOXIN</b>																
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1784-01-6)			X	DESCRIBE RESULTS												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)						
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES				
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS					
GC/MS FRACTION - VOLATILE COMPOUNDS																			
1V. Acrolein (107-02-8)			X																
2V. Acrylonitrile (107-13-1)			X																
3V. Benzene (71-43-2)			X																
4V. Bis (Chloromethyl) Ether (542-88-1)			X																
5V. Bromoform (75-25-2)			X																
6V. Carbon Tetrachloride (56-23-5)			X																
7V. Chlorobenzene (108-90-7)			X																
8V. Chlorodibromomethane (124-48-1)			X																
9V. Chloroethane (75-00-3)			X																
10V. 2-Chloroethylvinyl Ether (110-75-8)			X																
11V. Chloroform (67-66-3)			X																
12V. Dichlorobromomethane (75-27-4)			X																
13V. Dichlorodifluoromethane (75-71-8)			X																
14V. 1,1-Dichloroethane (75-34-3)			X																
15V. 1,2-Dichloroethane (107-06-2)			X																
16V. 1,1-Dichloroethylene (75-35-4)			X																
17V. 1,2-Dichloropropane (78-87-5)			X																
18V. 1,3-Dichloropropylene (542-75-8)			X																
19V. Ethylbenzene (100-41-4)			X																
20V. Methyl Bromide (74-83-9)			X																
21V. Methyl Chloride (74-87-3)			X																

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			X												
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X												
24V. Tetrachloroethylene (127-18-4)			X												
25V. Toluene (108-88-3)			X												
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X												
27V. 1,1,1-Trichloroethane (71-55-6)			X												
28V. 1,1,2-Trichloroethane (79-00-5)			X												
29V Trichloroethylene (79-01-6)			X												
30V. Trichlorofluoromethane (75-69-4)			X												
31V. Vinyl Chloride (75-01-4)			X												
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			X												
2A. 2,4-Dichlorophenol (120-83-2)			X												
3A. 2,4-Dimethylphenol (105-67-9)			X												
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X												
5A. 2,4-Dinitrophenol (51-28-5)			X												
6A. 2-Nitrophenol (88-75-5)			X												
7A. 4-Nitrophenol (100-02-7)			X												
8A. P-Chloro-M-Cresol (59-50-7)			X												
9A. Pentachlorophenol (87-86-5)			X												
10A. Phenol (108-95-2)			X												
11A. 2,4,6-Trichlorophenol (88-05-2)			X												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			X												
2B. Acenaphthylene (208-96-8)			X												
3B. Anthracene (120-12-7)			X												
4B. Benzidine (92-87-5)			X												
5B. Benzo (a) Anthracene (56-55-3)			X												
6B. Benzo (a) Pyrene (50-32-8)			X												
7B. 3,4-Benzo-fluoranthene (205-99-2)			X												
8B. Benzo (ghi) Perylene (191-24-2)			X												
9B. Benzo (k) Fluoranthene (207-08-9)			X												
10B. Bis (2-Chloro-ethoxy) Methane (111-91-1)			X												
11B. Bis (2-Chloro-ethyl) Ether (111-44-4)			X												
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)			X												
13B. Bis (2-Ethyl-hexyl) Phthalate (117-81-7)			X												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X												
15B. Butyl Benzyl Phthalate (85-68-7)			X												
16B. 2-Chloro-naphthalene (91-58-7)			X												
17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3)			X												
18B. Chrysene (218-01-9)			X												
19B. Dibenzo (a,h) Anthracene (53-70-3)			X												
20B. 1,2-Dichloro-benzene (95-50-1)			X												
21B. 1,3-Di-chloro-benzene (541-73-1)			X												

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichloro- benzene (106-46-7)			X												
23B. 3,3-Dichloro- benzidine (91-94-1)			X												
24B. Diethyl Phthalate (84-66-2)			X												
25B. Dimethyl Phthalate (131-11-3)			X												
26B. Di-N-Butyl Phthalate (84-74-2)			X												
27B. 2,4-Dinitro- toluene (121-14-2)			X												
28B. 2,6-Dinitro- toluene (606-20-2)			X												
29B. Di-N-Octyl Phthalate (117-84-0)			X												
30B. 1,2-Diphenyl- hydrazine (as Azo- benzene) (122-66-7)			X												
31B. Fluoranthene (206-44-0)			X												
32B. Fluorene (86-73-7)			X												
33B. Hexachloro- benzene (118-74-1)			X												
34B. Hexachloro- butadiene (87-68-3)			X												
35B. Hexachloro- cyclopentadiene (77-47-4)			X												
36B Hexachloro- ethane (67-72-1)			X												
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X												
38B. Isophorone (78-59-1)			X												
39B. Naphthalene (91-20-3)			X												
40B. Nitrobenzene (98-95-3)			X												
41B. N-Nitro- sodimethylamine (62-75-9)			X												
42B. N-Nitrosodi- N-Propylamine (621-64-7)			X												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
																(1) CONCENTRATION
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)																
43B. N-Nitro- sodiphenylamine (86-30-6)			X													
44B. Phenanthrene (85-01-8)			X													
45B. Pyrene (129-00-0)			X													
46B. 1,2,4-Tri- chlorobenzene (120-82-1)			X													
GC/MS FRACTION - PESTICIDES																
1P. Aldrin (309-00-2)			X													
2P. α-BHC (319-84-6)			X													
3P. β-BHC (319-85-7)			X													
4P. γ-BHC (58-89-9)			X													
5P. δ-BHC (319-86-8)			X													
6P. Chlordane (57-74-9)			X													
7P. 4,4'-DDT (50-29-3)			X													
8P. 4,4'-DDE (72-55-9)			X													
9P. 4,4'-DDD (72-54-8)			X													
10P. Dieldrin (60-57-1)			X													
11P. α-Endosulfan (115-29-7)			X													
12P. β-Endosulfan (115-29-7)			X													
13P. Endosulfan Sulfate (1031-07-8)			X													
14P. Endrin (72-20-8)			X													
15P. Endrin Aldehyde (7421-93-4)			X													
16P. Heptachlor (76-44-8)			X													



EPA I.D. NUMBER (copy from Item 1 of Form 1)

OUTFALL NUMBER

VA0002151

035

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS			
GC/MS FRACTION - PESTICIDES (continued)																	
17P. Heptachlor Epoxide (1024-57-3)			X														
18P. PCB-1242 (53469-21-9)			X														
19P. PCB-1254 (11097-69-1)			X														
20P. PCB-1221 (11104-28-2)			X														
21P. PCB-1232 (11141-16-5)			X														
22P. PCB-1248 (12672-29-6)			X														
23P. PCB-1260 (11096-82-5)			X														
24P. PCB-1016 (12674-11-2)			X														
25P. Toxaphene (8001-35-2)			X														

CONTINUED FROM THE FRONT

**VII. BIOLOGICAL TOXICITY TESTING DATA**

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☒ YES (identify the test(s) and describe their purposes below)

☐ NO (go to Section VIII)

Please see biological testing summary on the following page.

**VIII. CONTRACT ANALYSIS INFORMATION**

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☒ YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

☐ NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
Universal Laboratories	20 Research Drive Hampton, VA 23666	800-695-2162	All except pH, Total Residual Chlorine, and Temperature

**IX. CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (type or print)

B. PHONE NO. (area code & no.)

J.D. Provenzano III, Deputy, AC/S Installation & Env. Div.

703-432-0539

C. SIGNATURE

D. DATE SIGNED

23 JUN 2016

Table 2C.VII  
 MCB Quantico VPDES Permit Renewal  
 VPDES Permit No. VA 0002151

<b>Outfall 016</b>	<b>Acute 48 HR STAT Ceriodaphnia Dubia, TUa</b>	<b>Acute 48 HR STAT Pimephales Promelas, TUa</b>
Jan 1, 2013 to Mar 31, 2013	<1.00	<1.00
Apr 1, 2013 to Jun 30, 2013	<1.00	<1.00
July 1, 2013 to Sept 30, 2013	<1.00	<1.00
Oct 1, 2013 to Dec 31, 2013	<1.00	<1.00
Jan 1, 2014 to Mar 31, 2014	<1.00	<1.00
Apr 1, 2014 to Jun 30, 2014	<1.02	<1.00
July 1, 2014 to Sept 30, 2014	<1.00	<1.00
Oct 1, 2014 to Dec 31, 2014	<1.00	<1.00
Jan 1, 2015 to Mar 31, 2015	<1.00	<1.00
Apr 1, 2014 to Jun 30, 2015	<1.00	<1.00
July 1, 2015 to Sept 30, 2015	<1.00	<1.00
Oct 1, 2015 to Dec 31, 2015	<1.02	<1.00

**FORM  
2F  
NPDES**



# Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

[illegible]

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

[illegible]

### III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfalls(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage of disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which received storm water discharges from the facility.